

Fig. 1

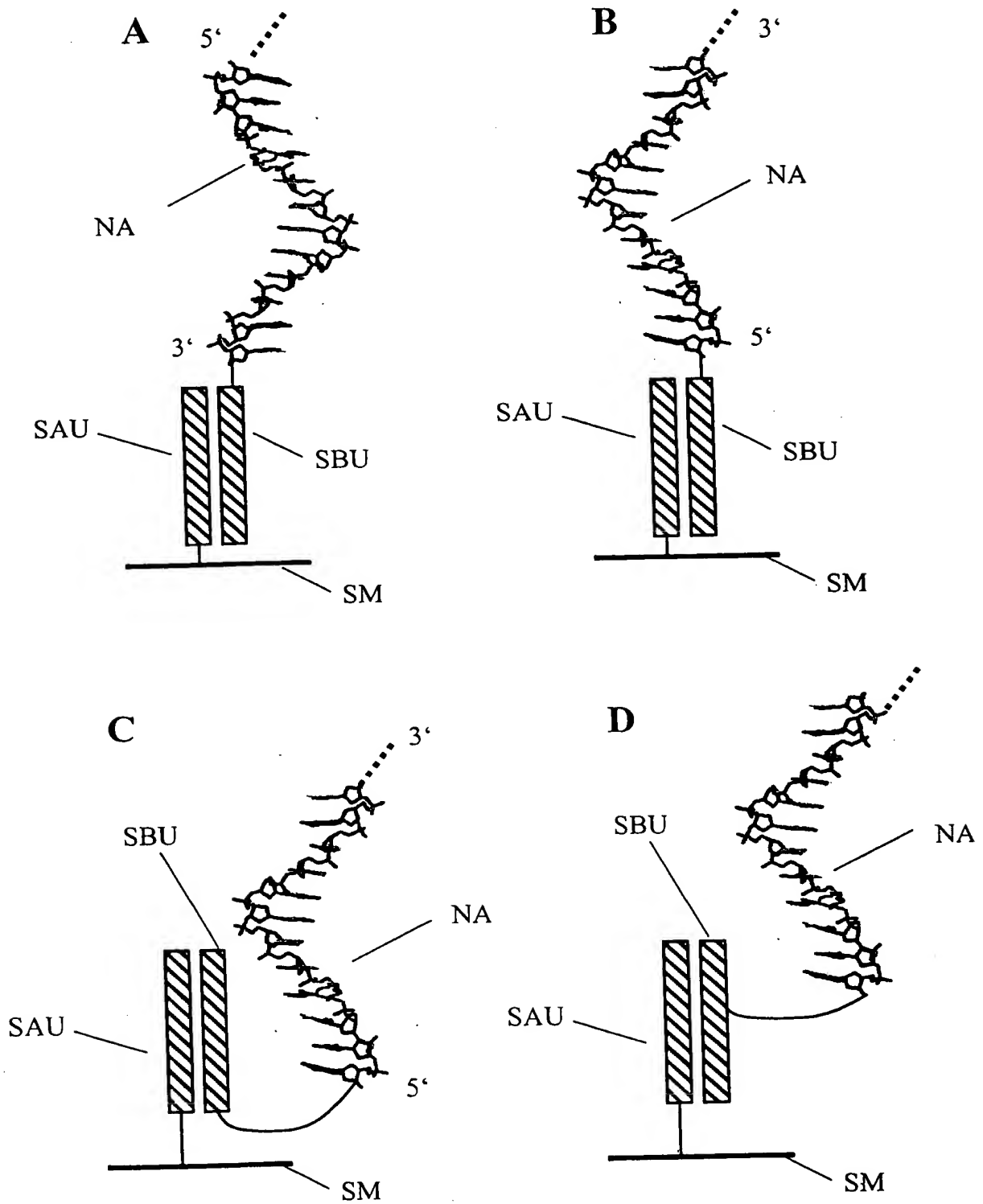


Fig. 2

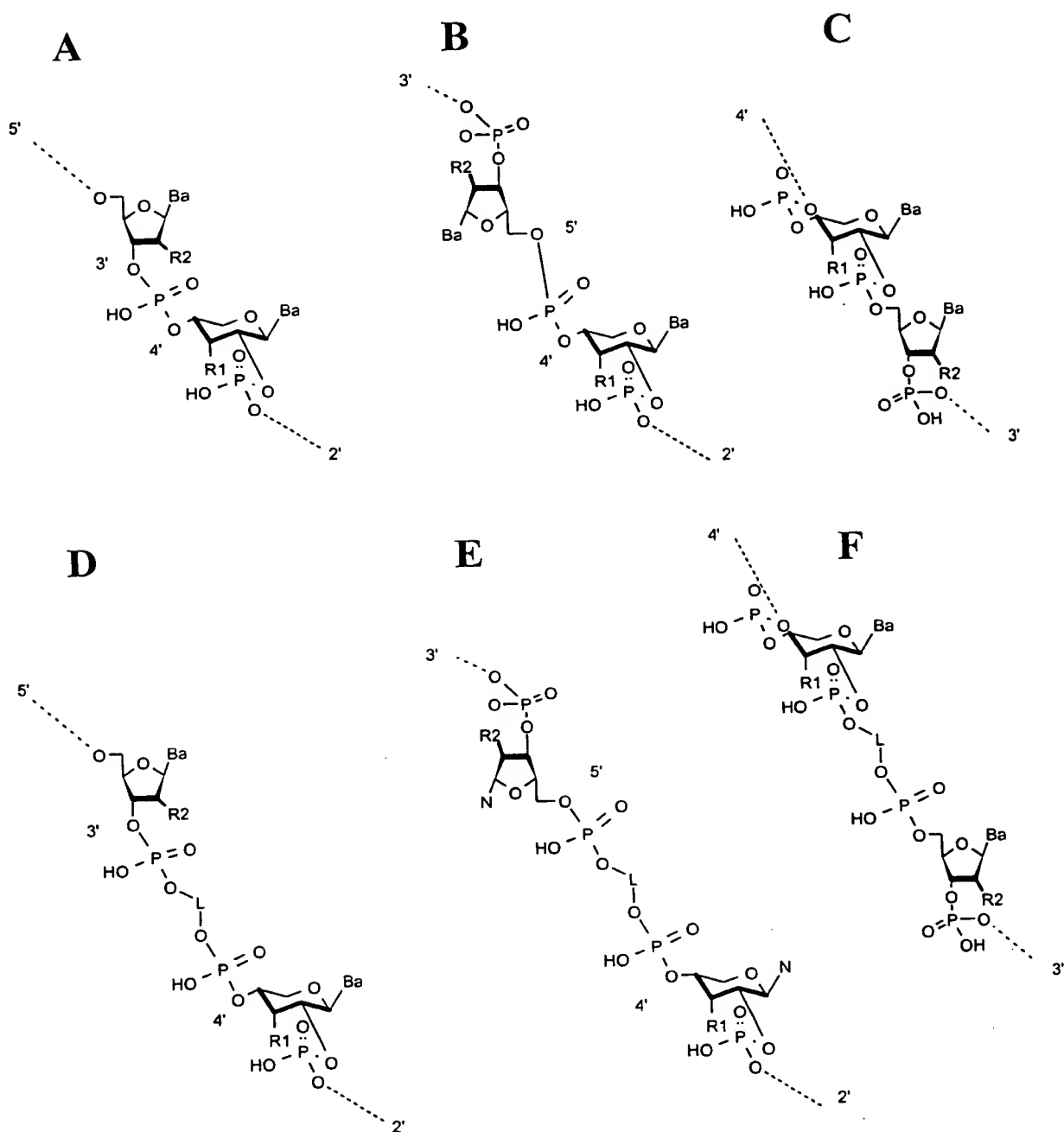


Fig. 3

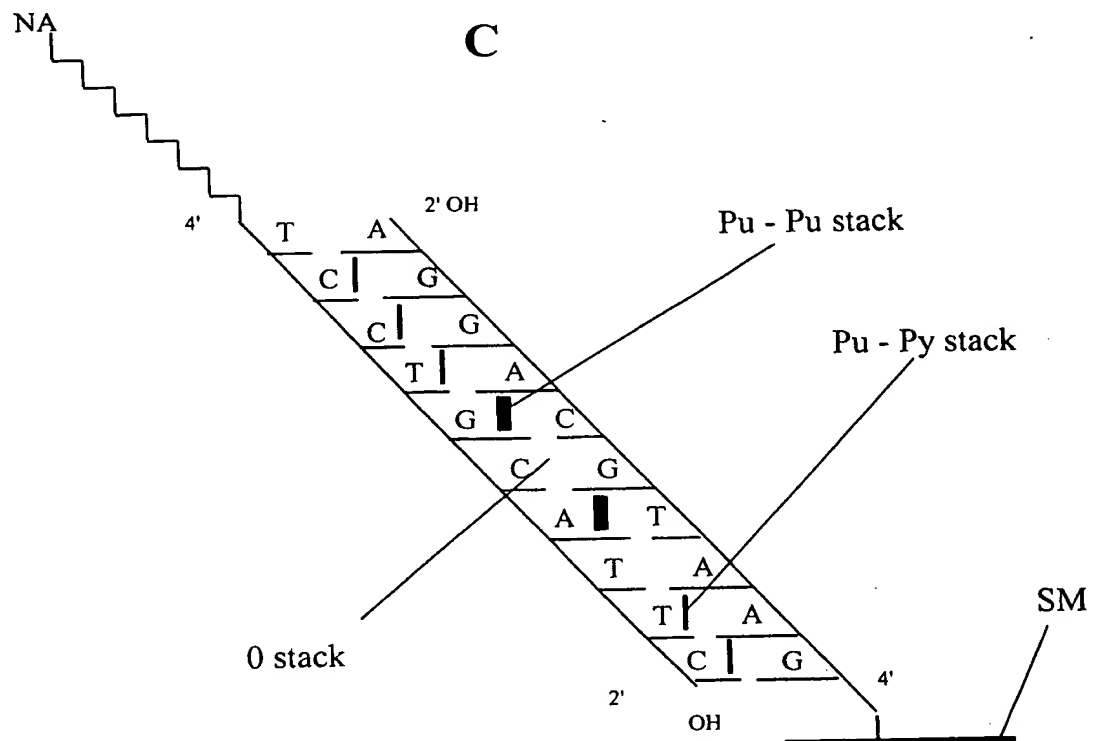
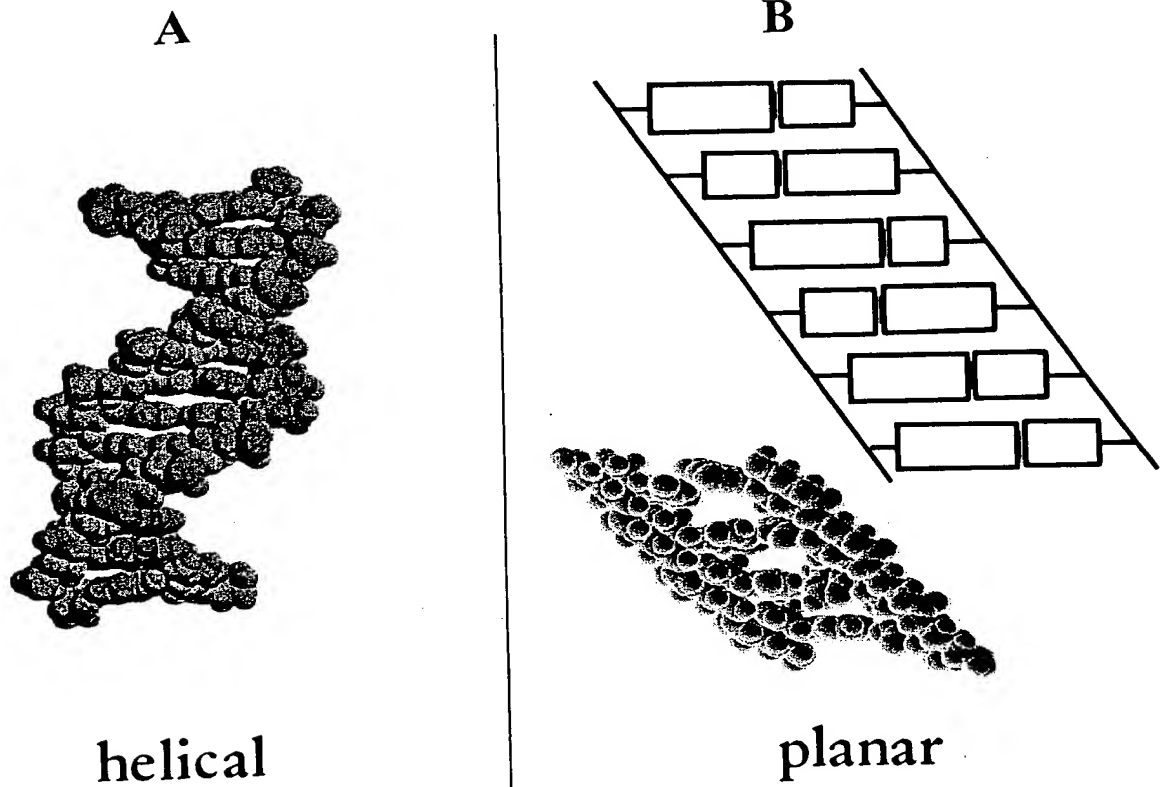


Fig. 4

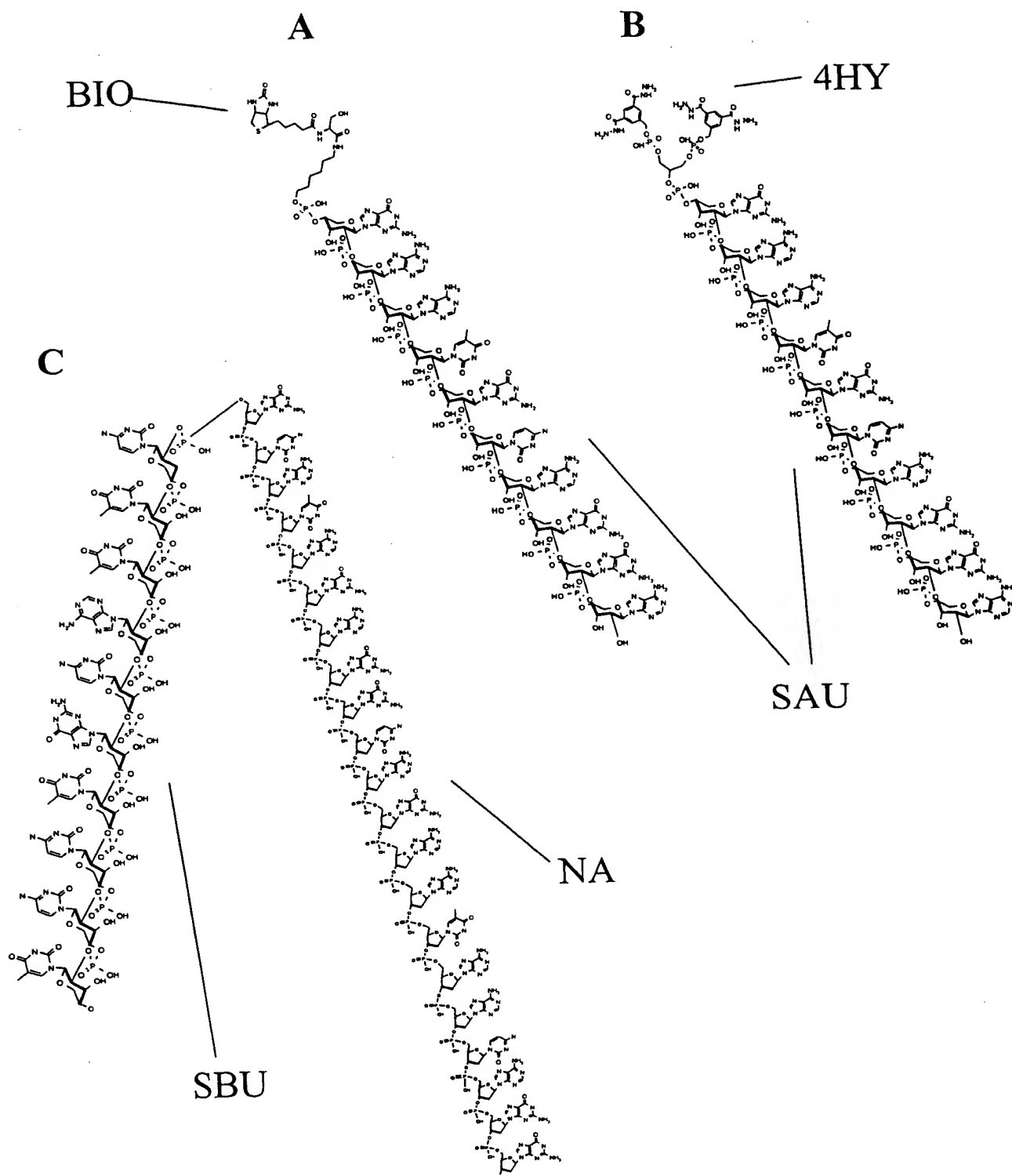


Fig. 5

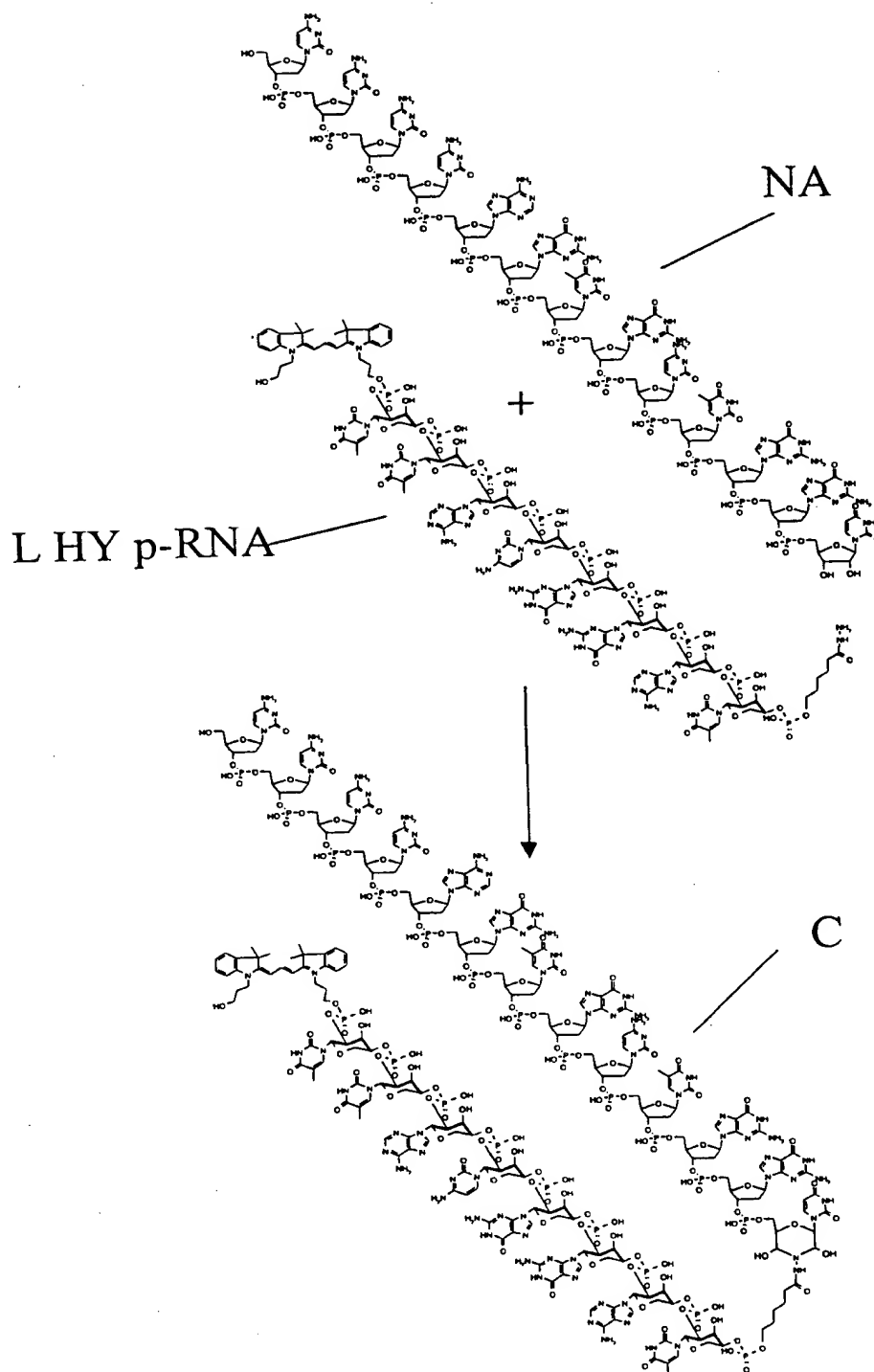


Fig. 6

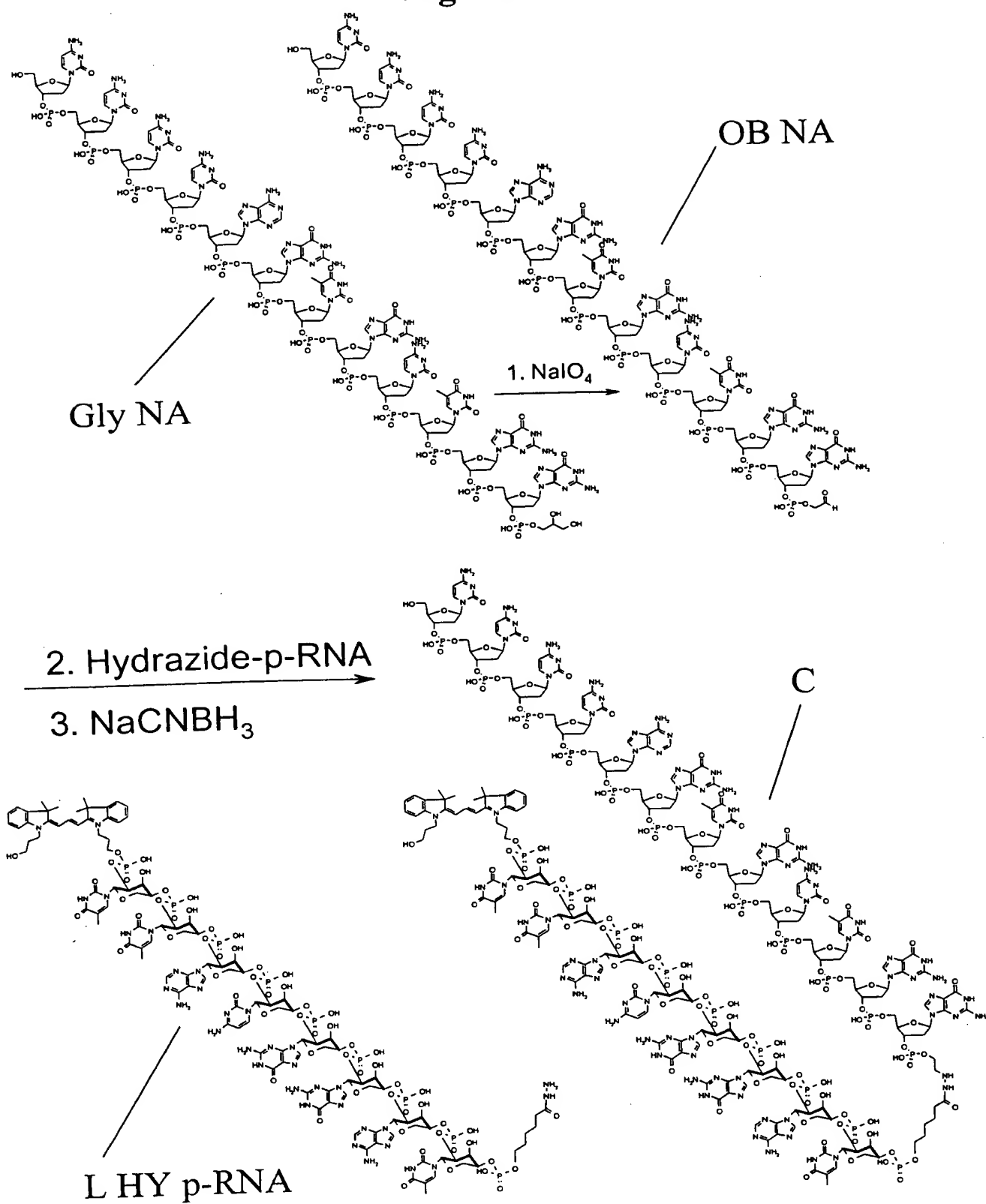


Fig. 7

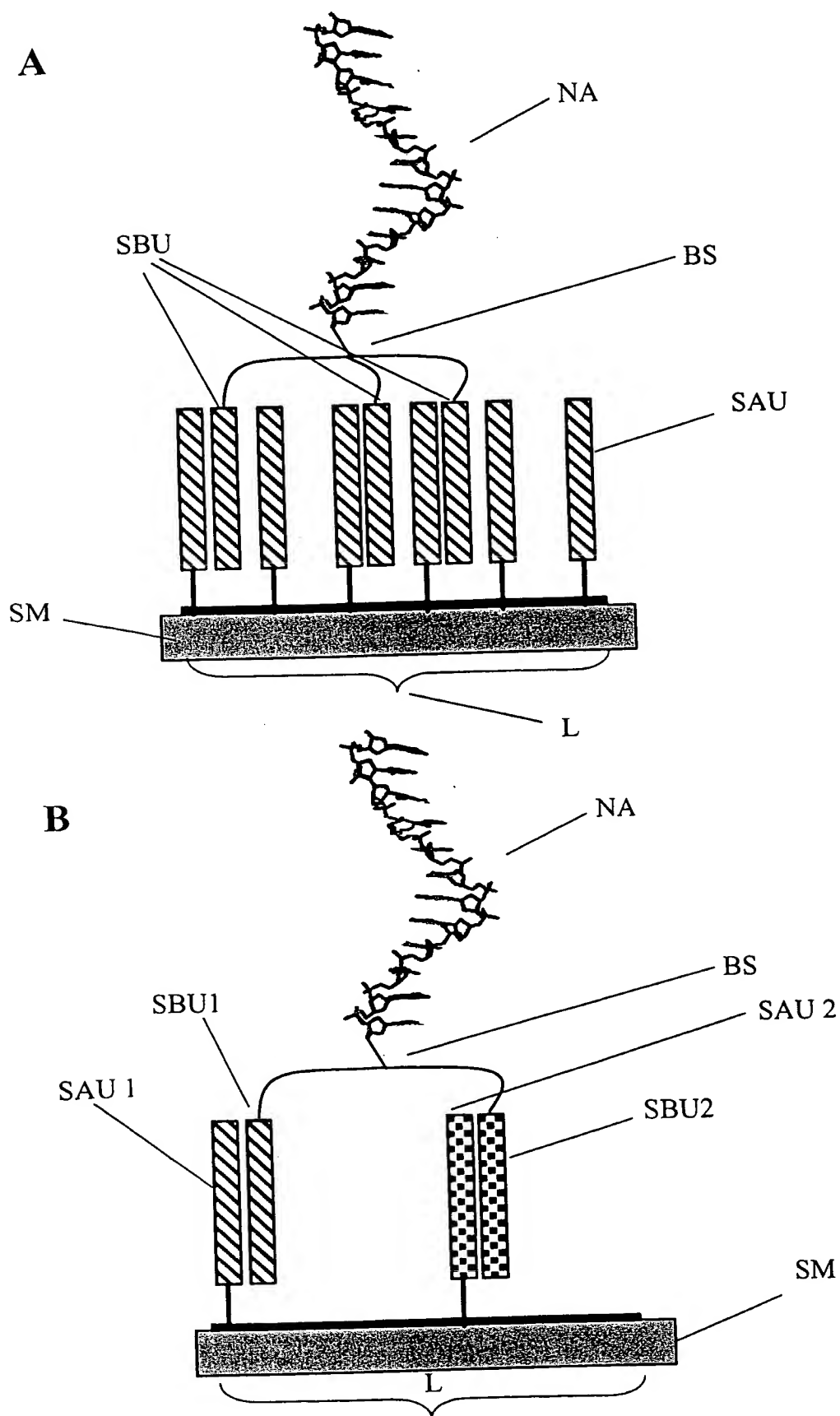


Fig. 8

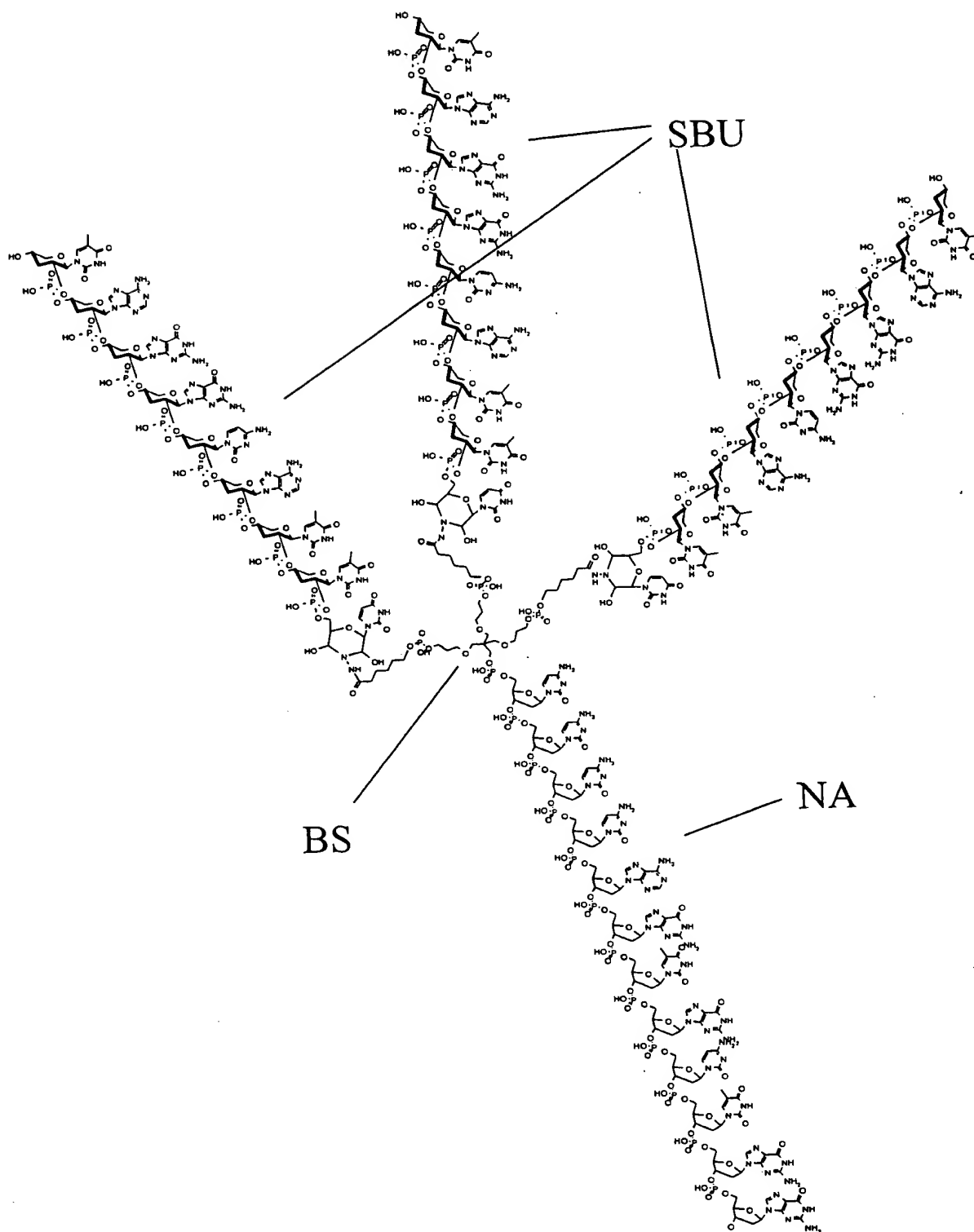


Fig. 9

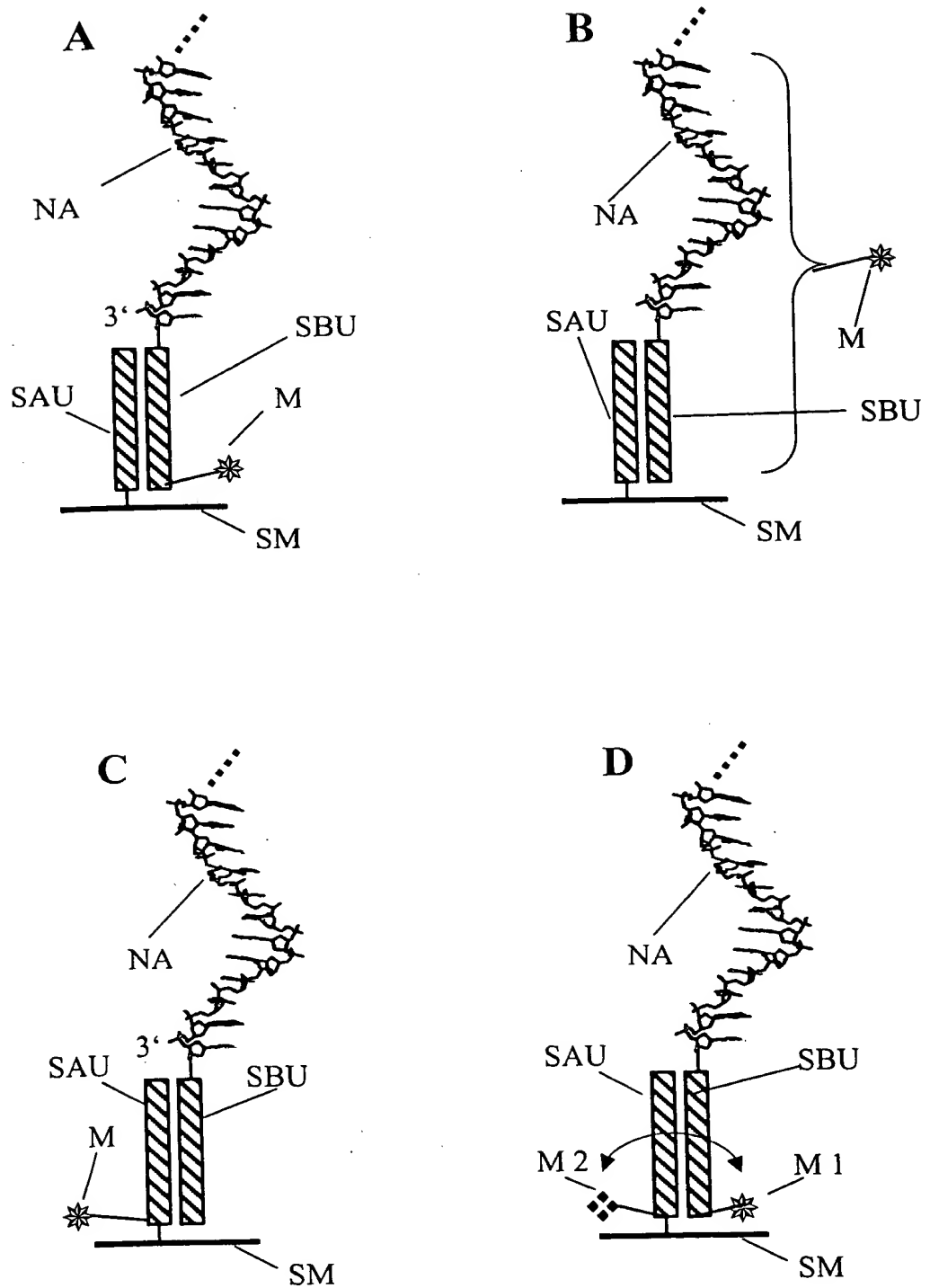


Fig. 10

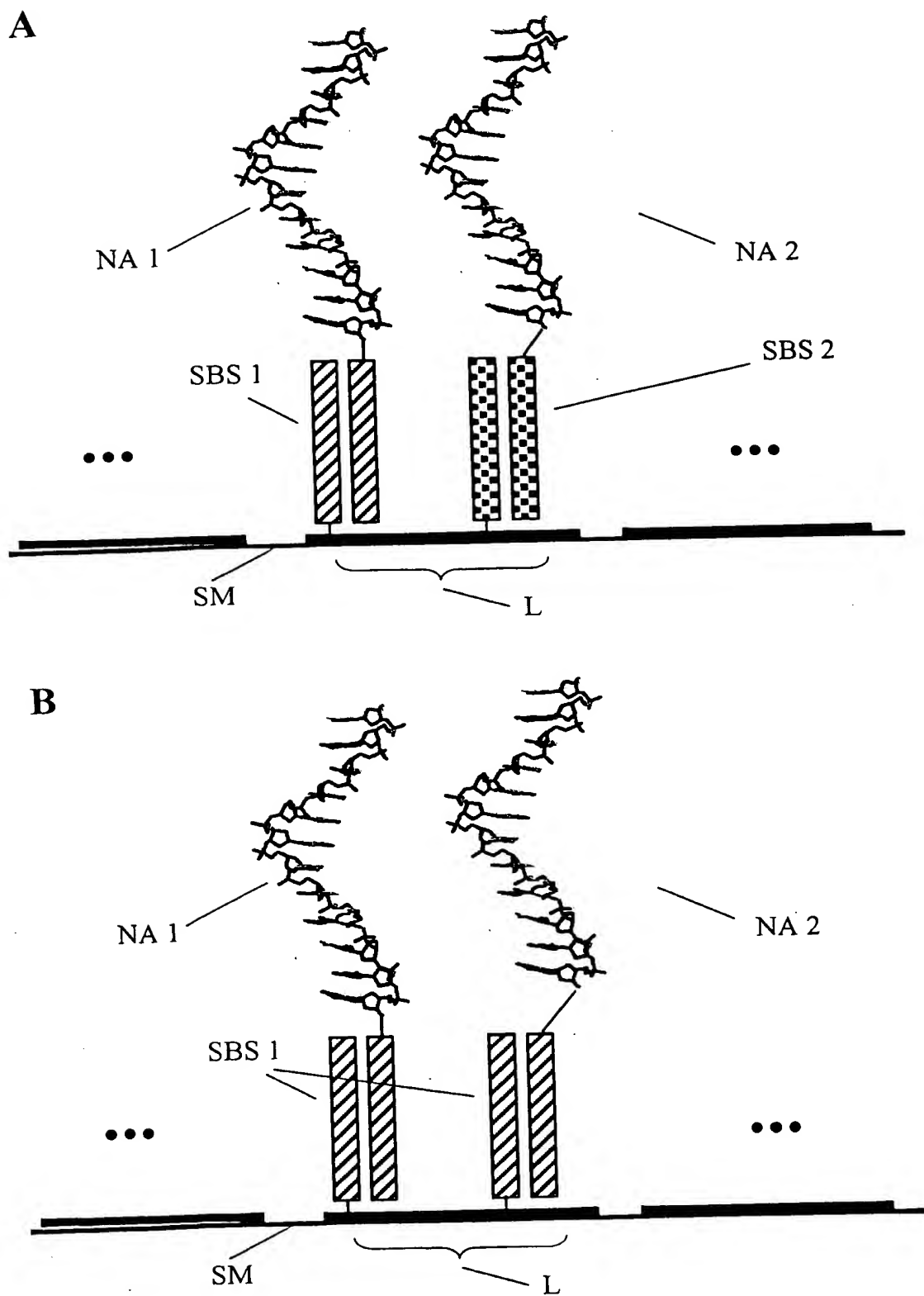


Fig. 11

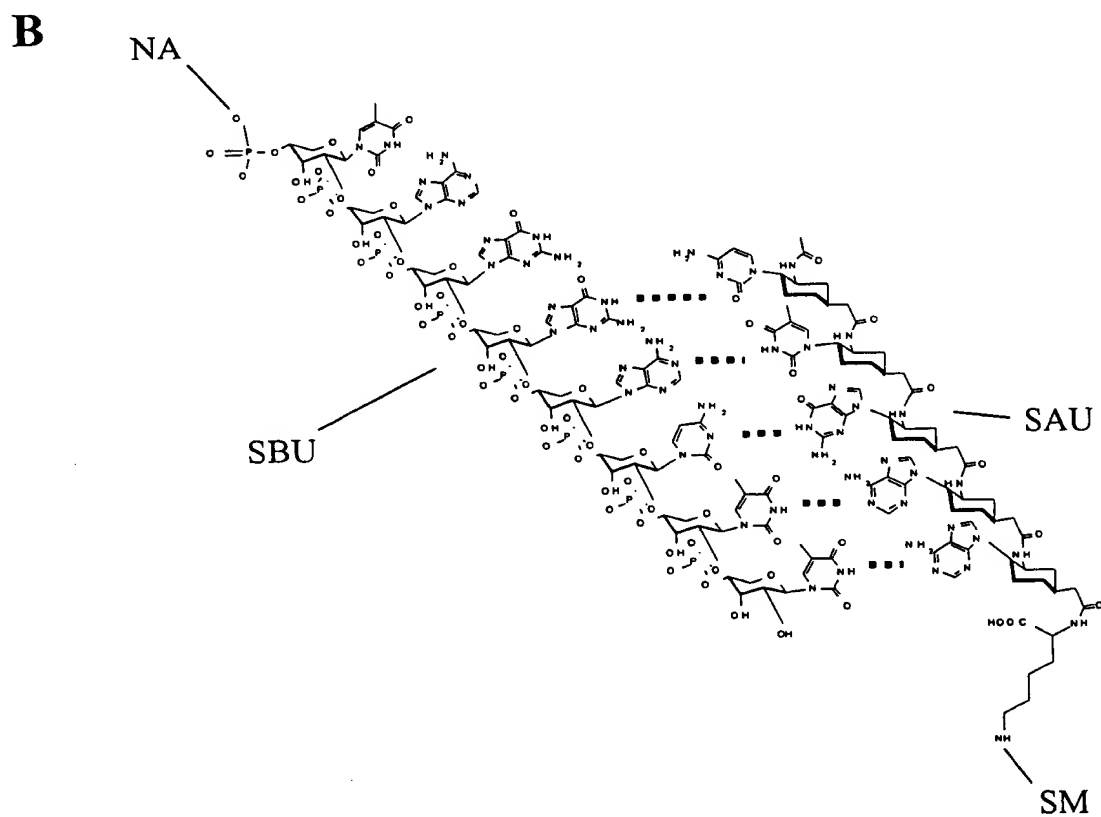
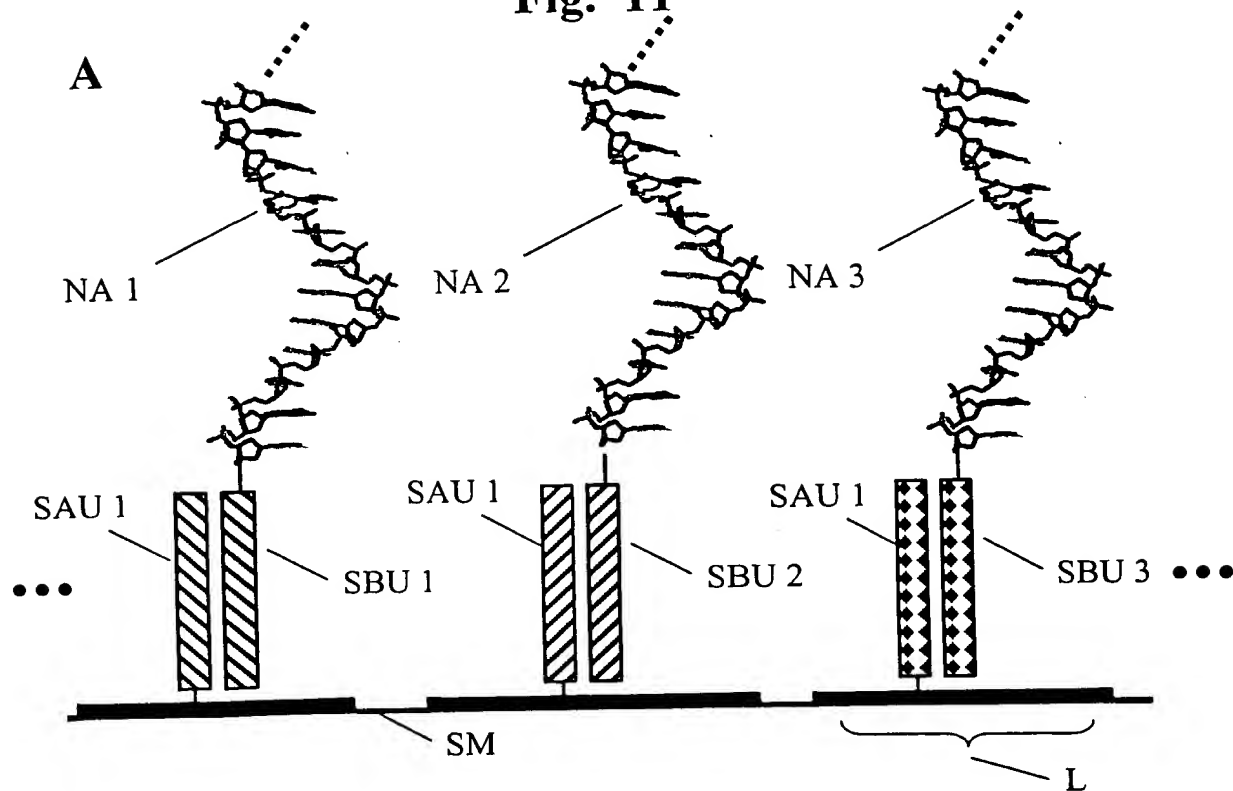
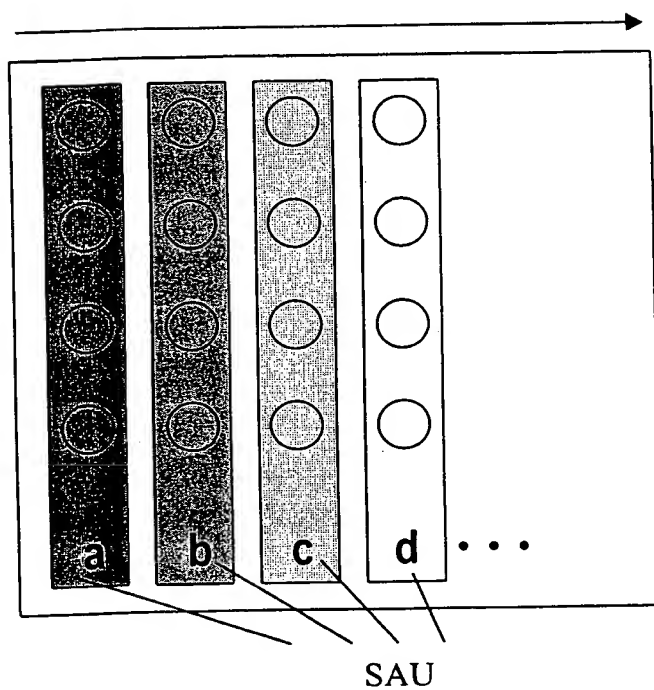


Fig. 12

A:



B:

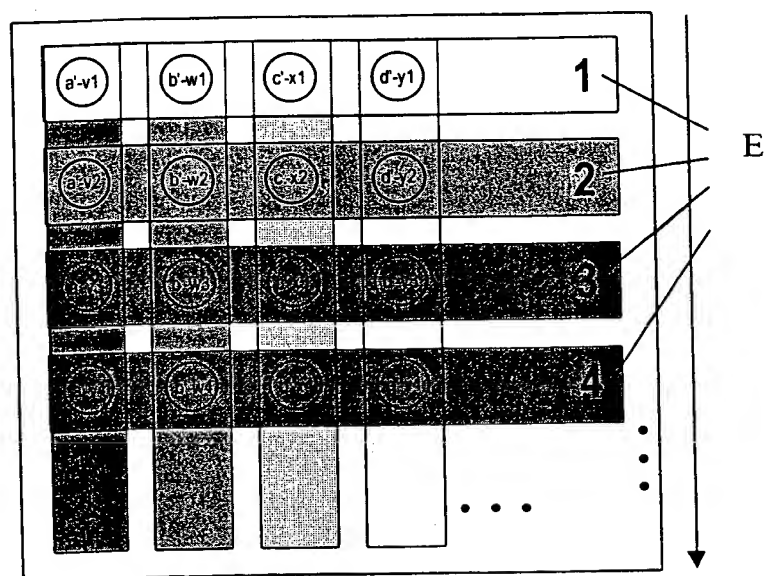
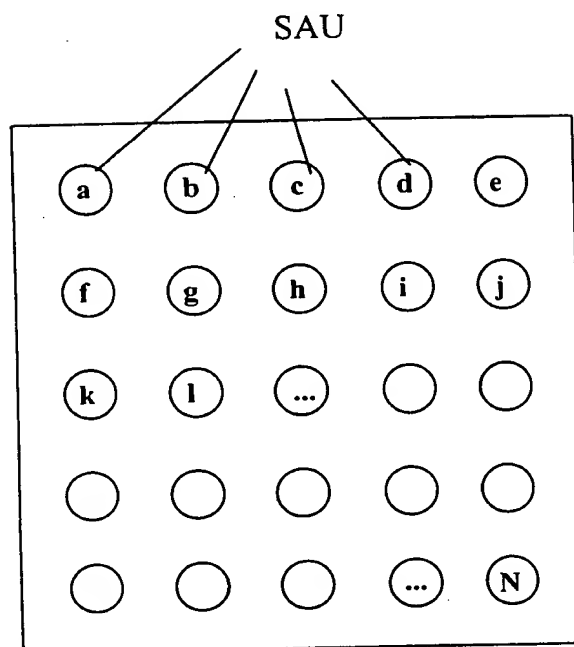


Fig. 13

A:



B:

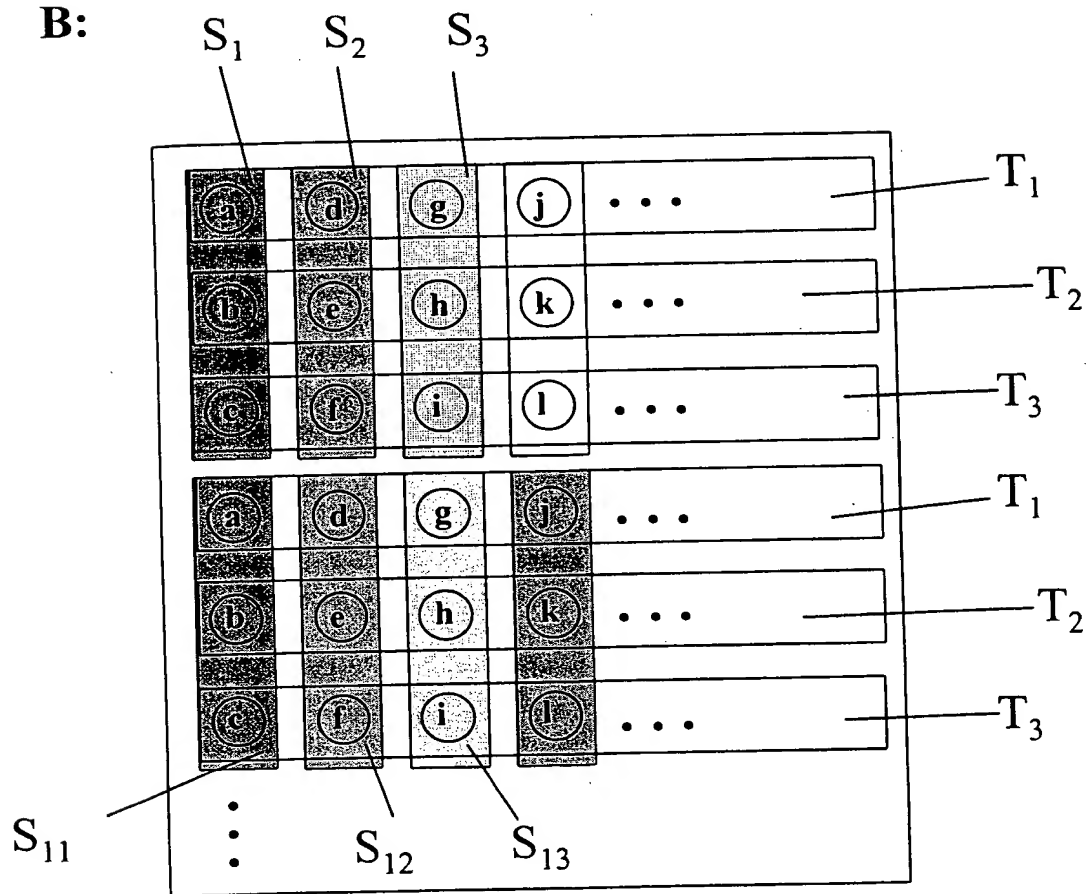


Fig. 14
Selective binding of SBS on SPR

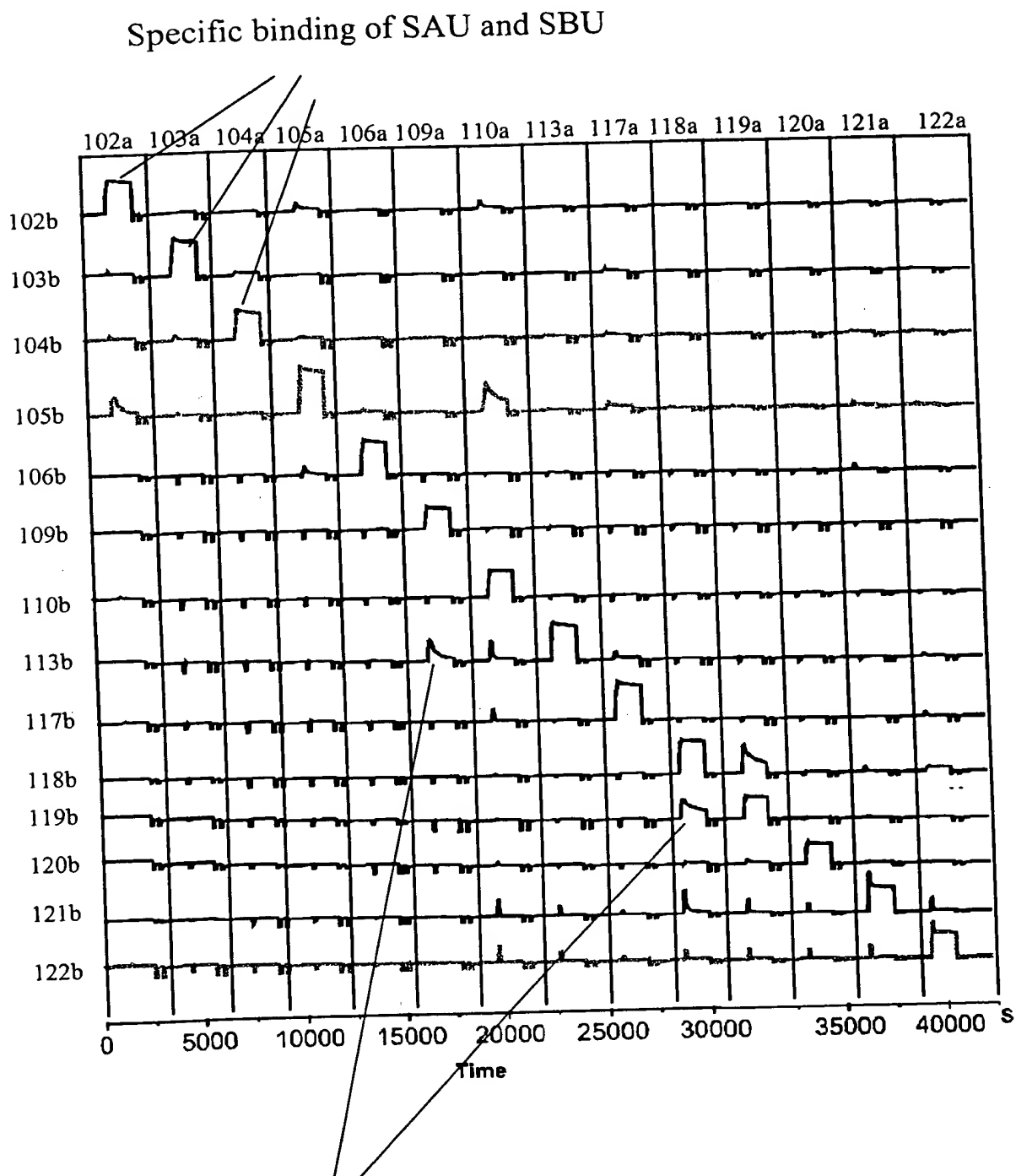


Fig. 15
Selective Binding of SBU and SAU on chip arrays

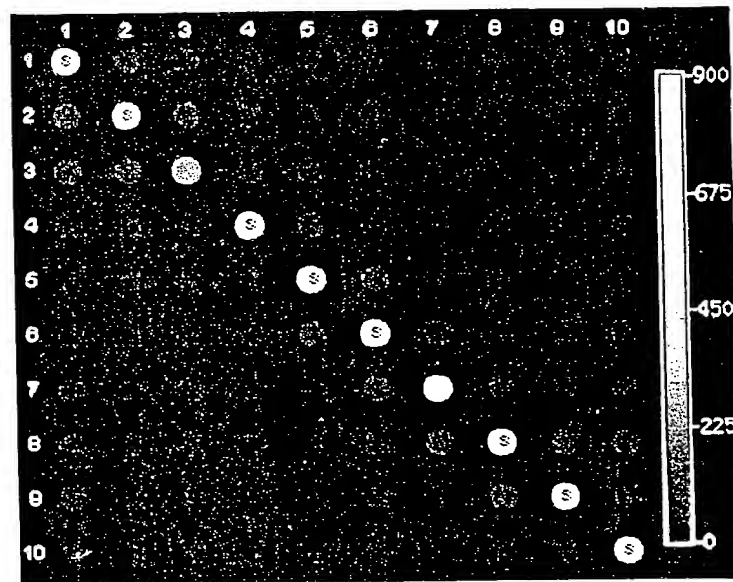


Fig. 16
Immobilization of conjugates on SPR chips

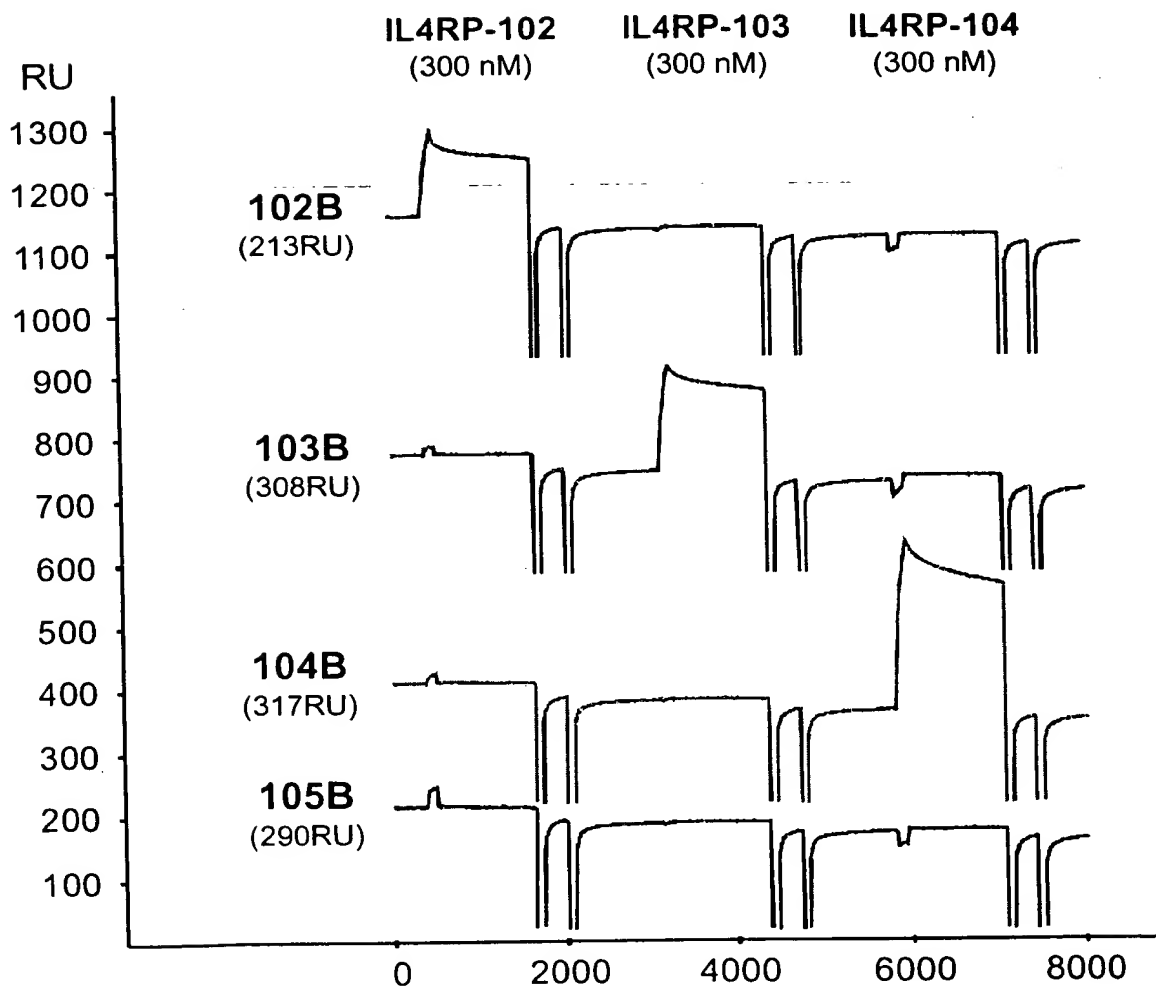


Fig. 17
Immobilization of conjugates
on SPR chips and hybridization with
complementary DNA

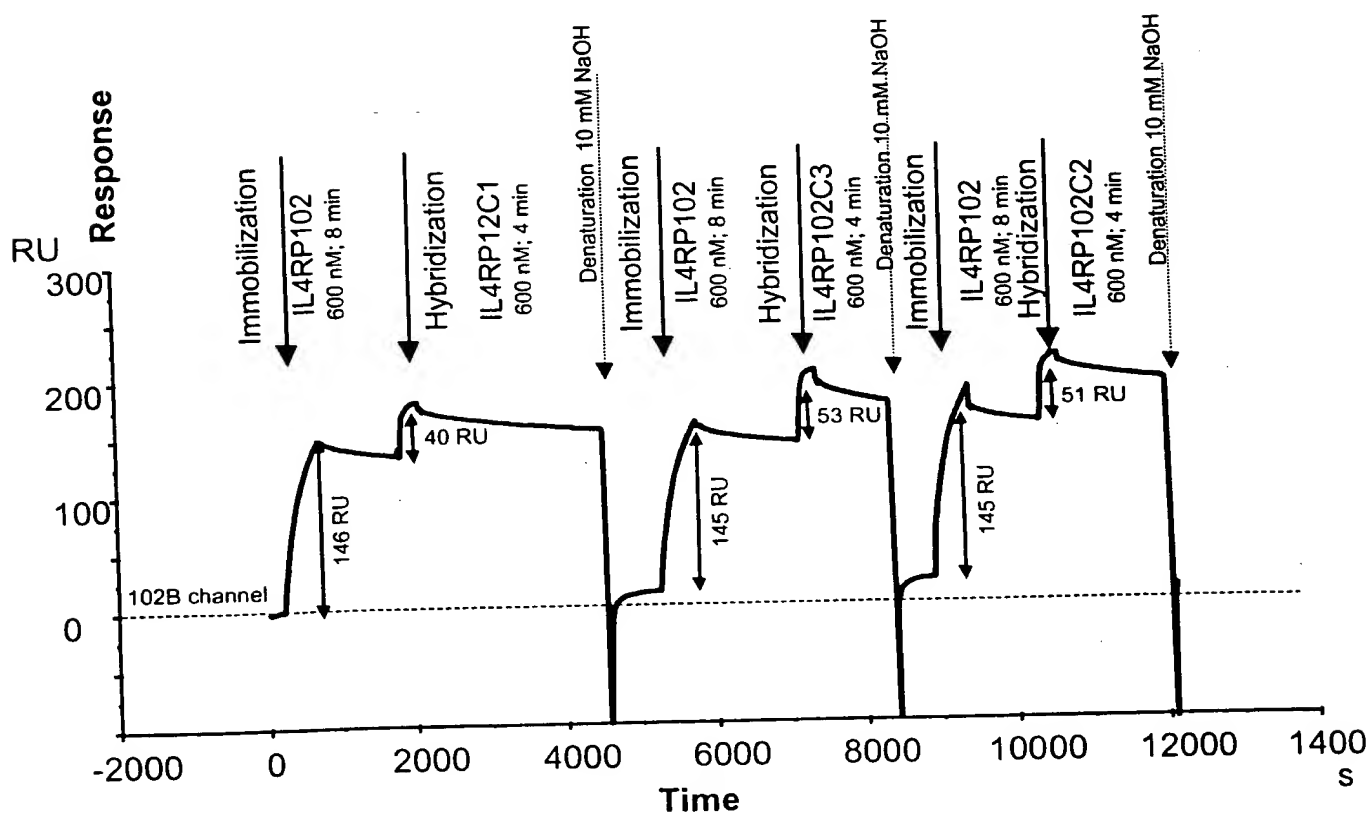
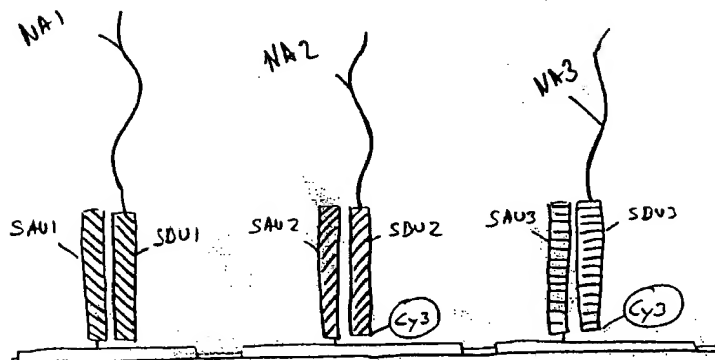
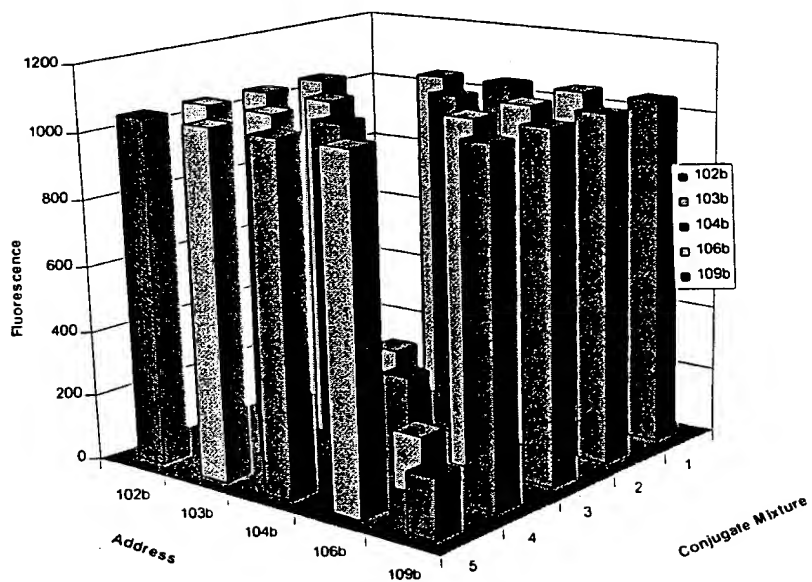


Fig. 18



Deconvolution of Conjugate Mixtures



	1	2	3	4	5
102b					
103b					
104b					
106b					
109b					

Fig. 19

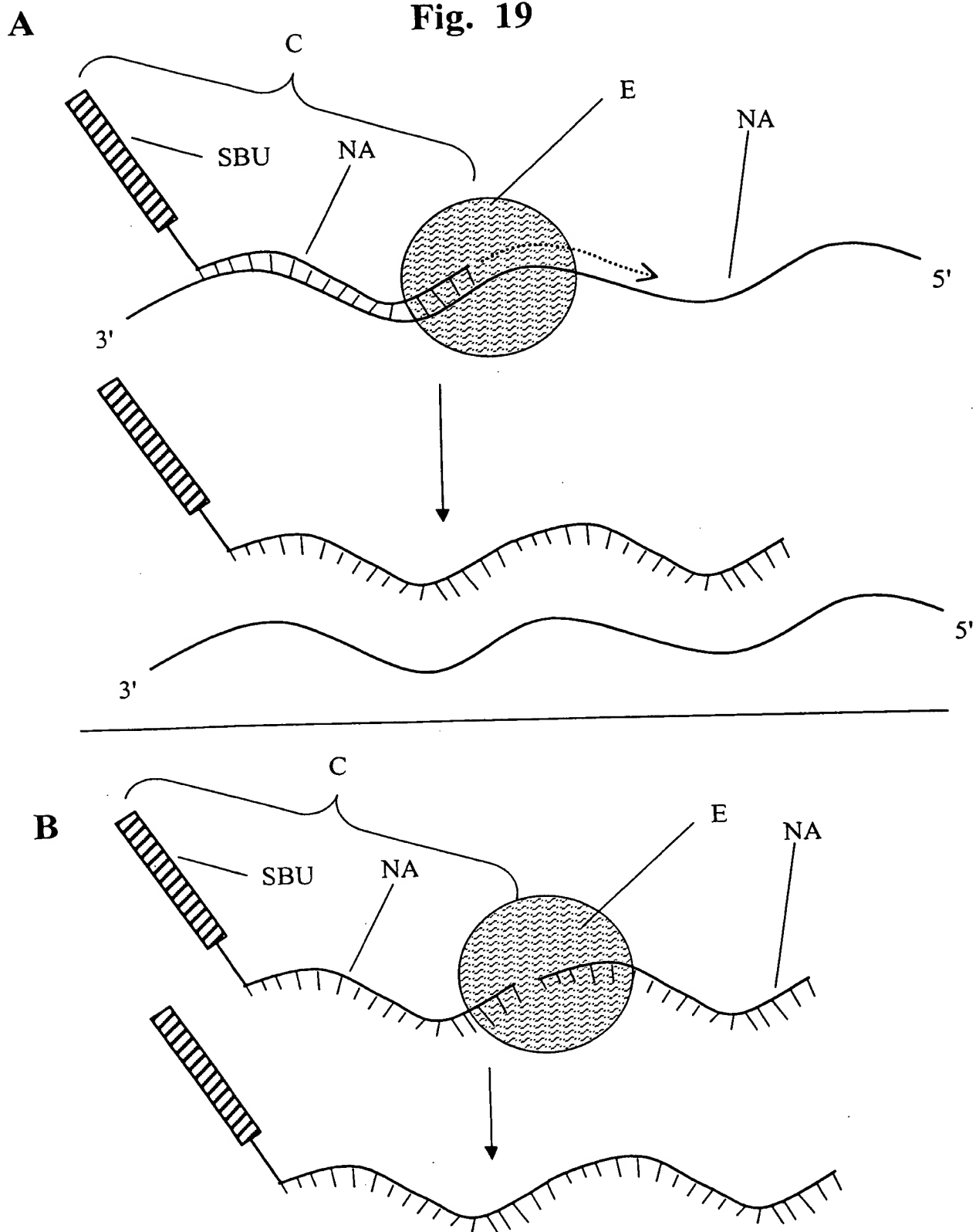


Fig. 20a

A

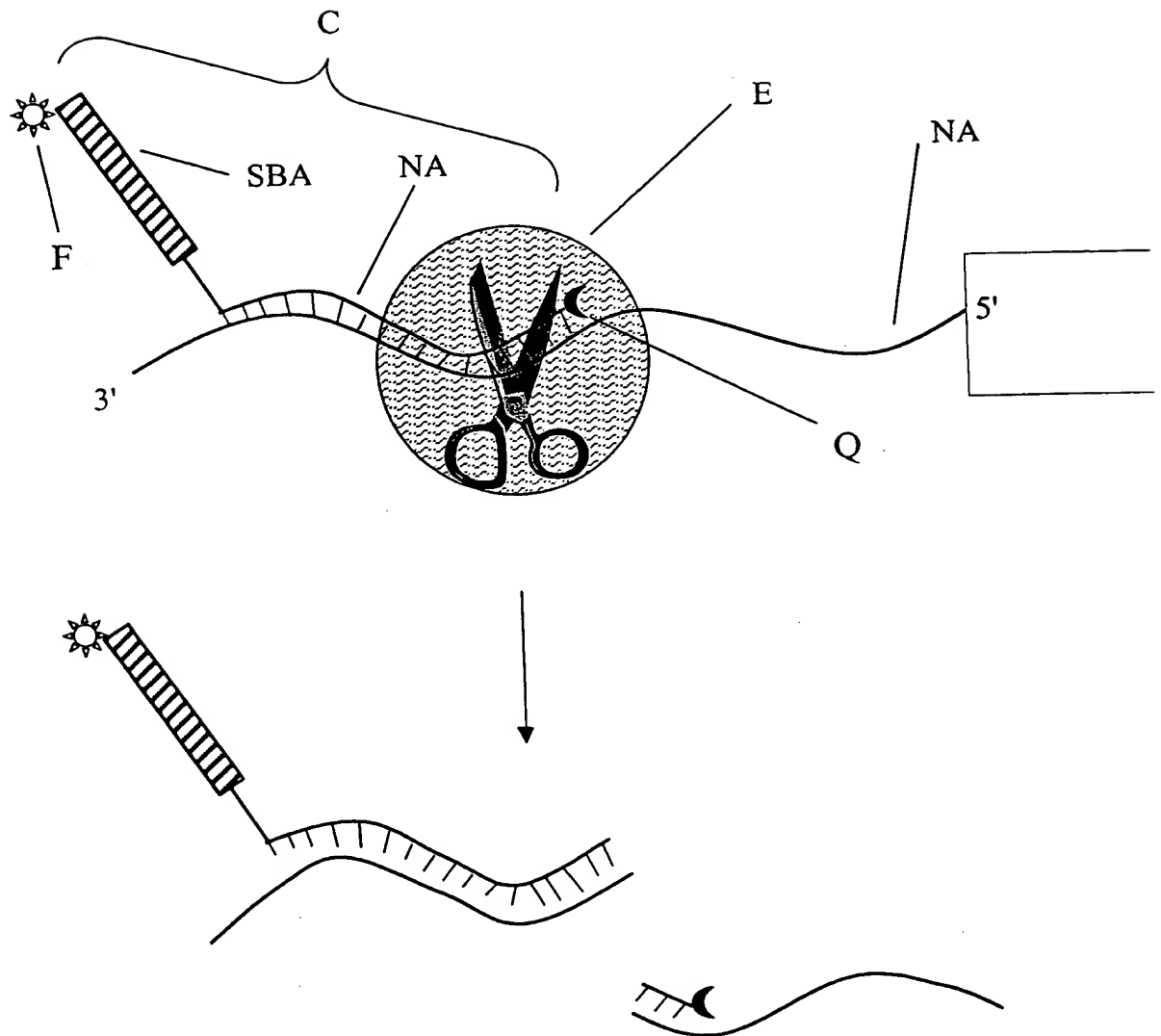


Fig. 20b

A

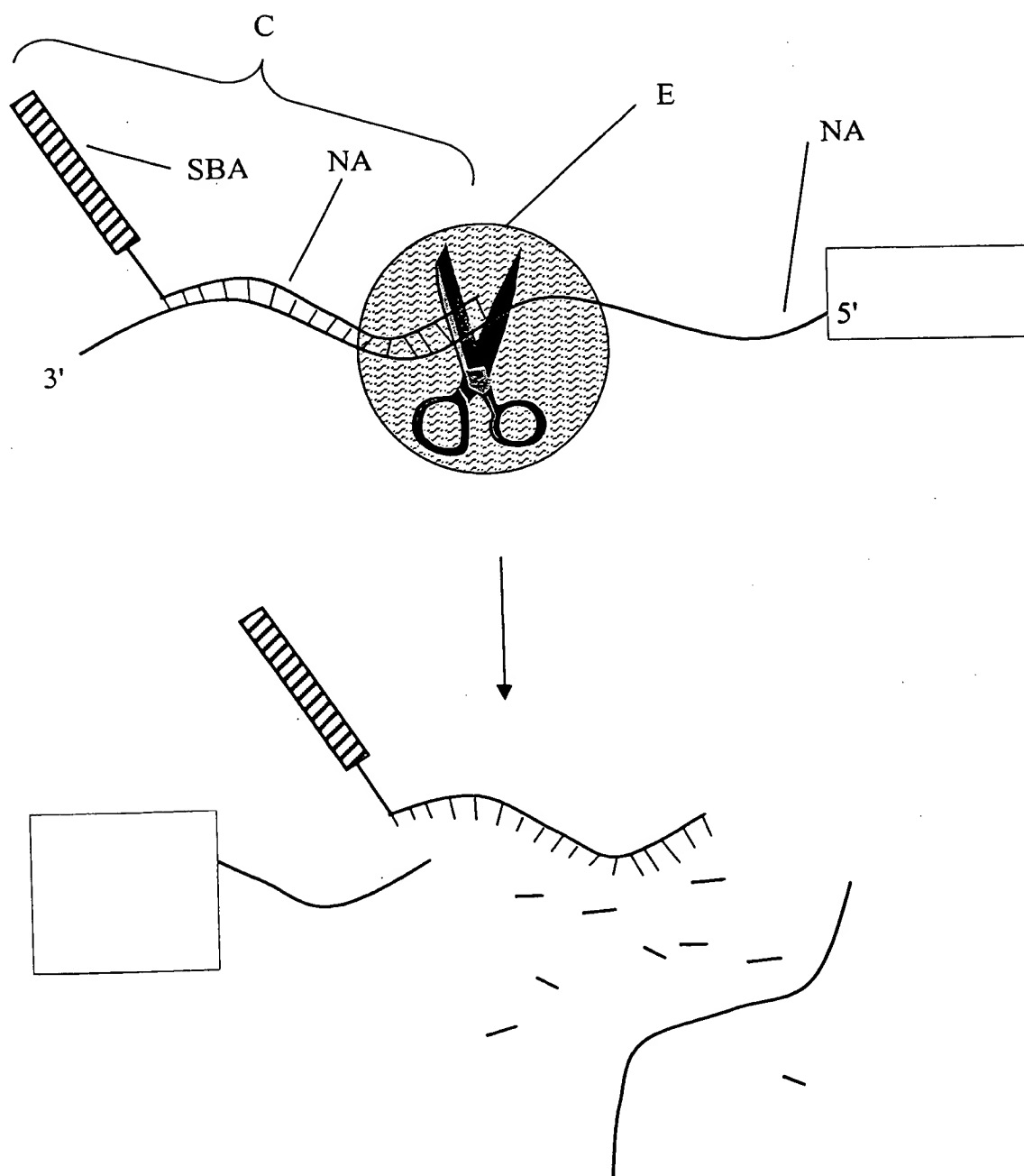


Fig. 21

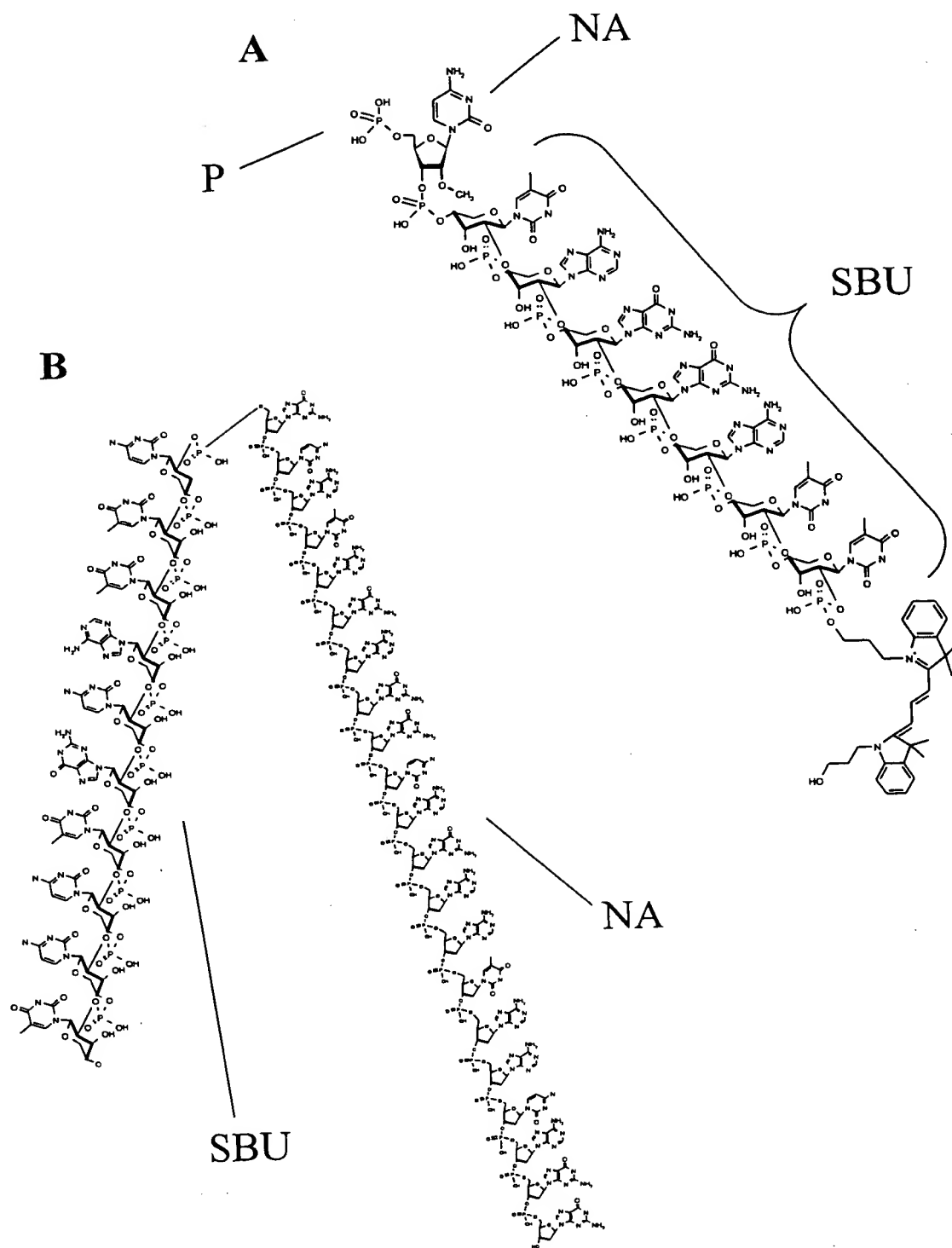


Fig. 22

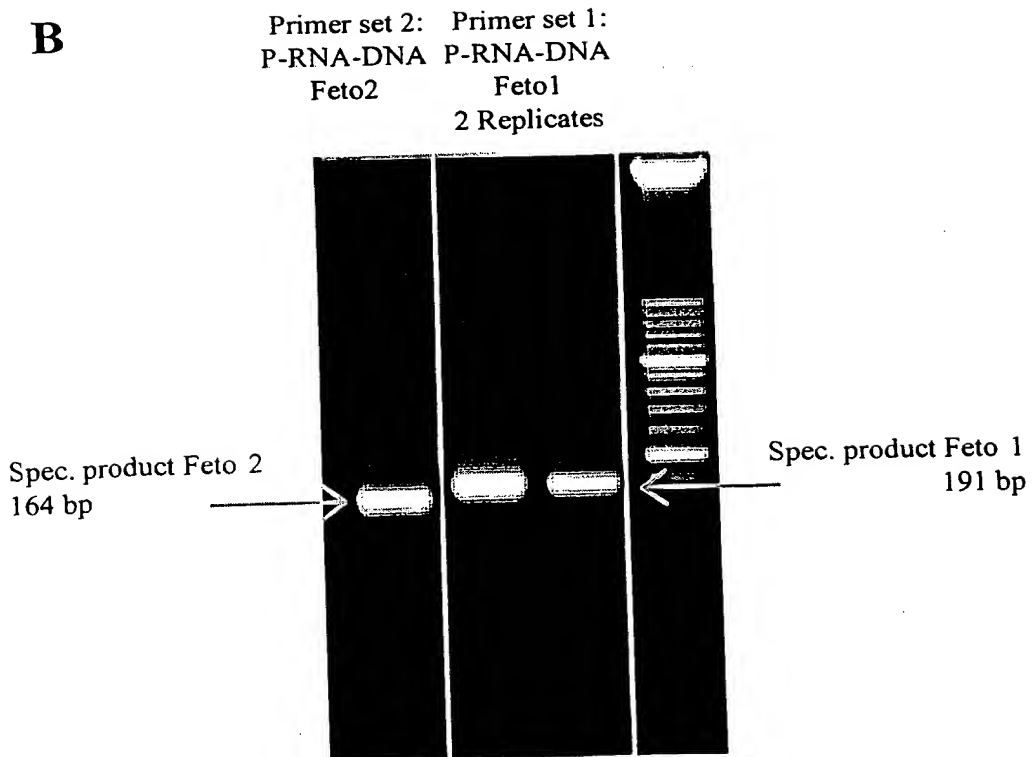
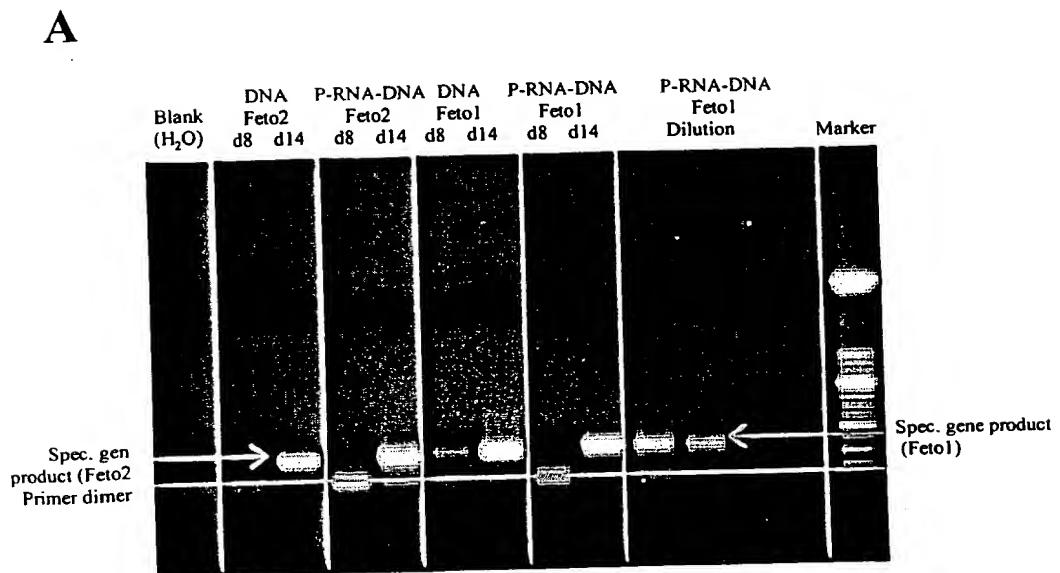


Fig. 23

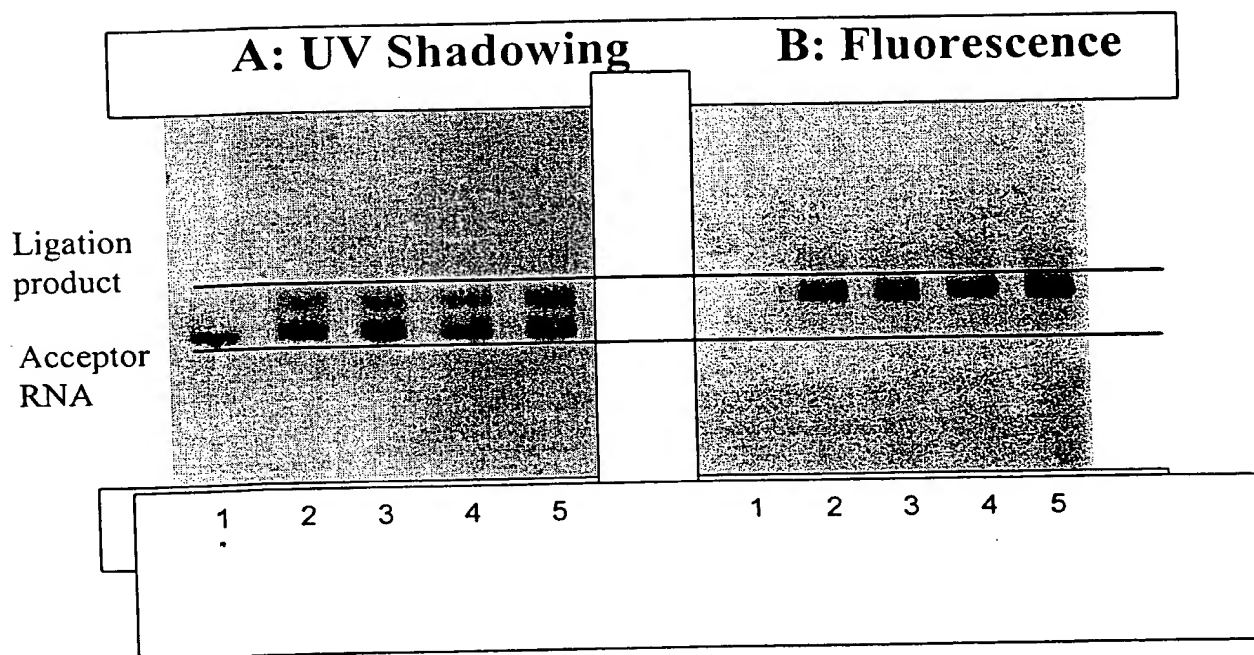


Fig. 24

**Addressing of SBU to SAU
SDA Primers on same or different SBU**

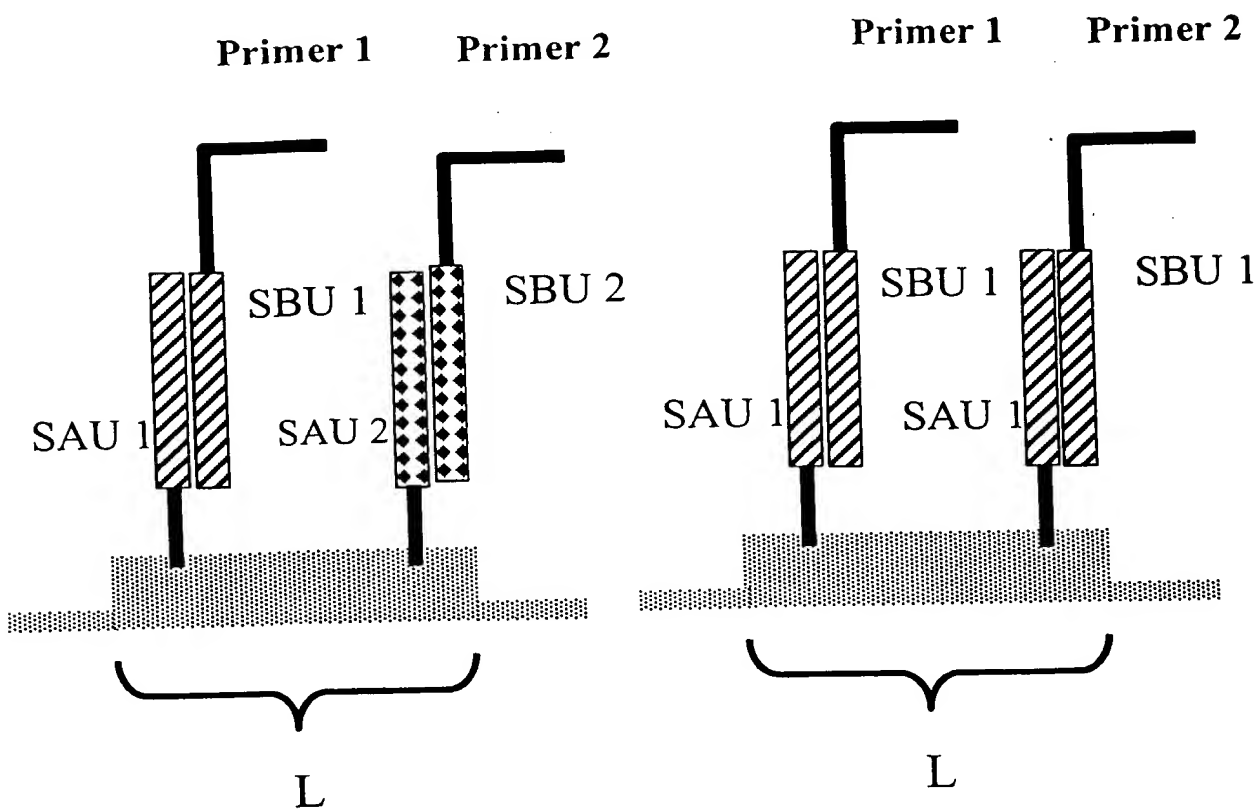


Fig. 25

**Addressing of SBU to SAU
Both SDA primers on the same SBU**

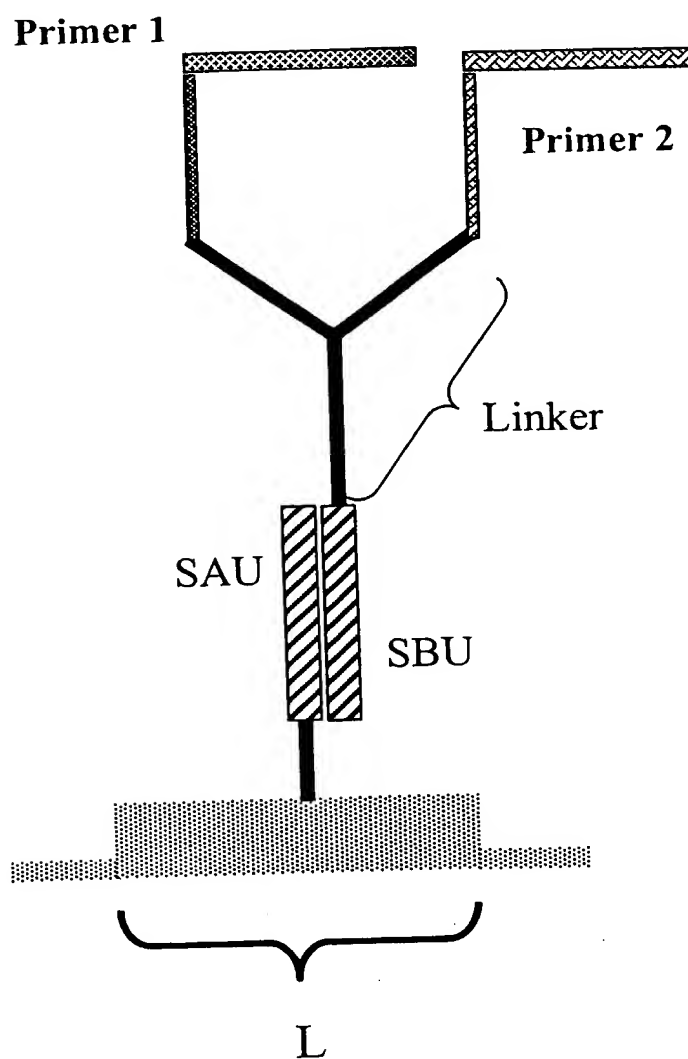


Fig. 26

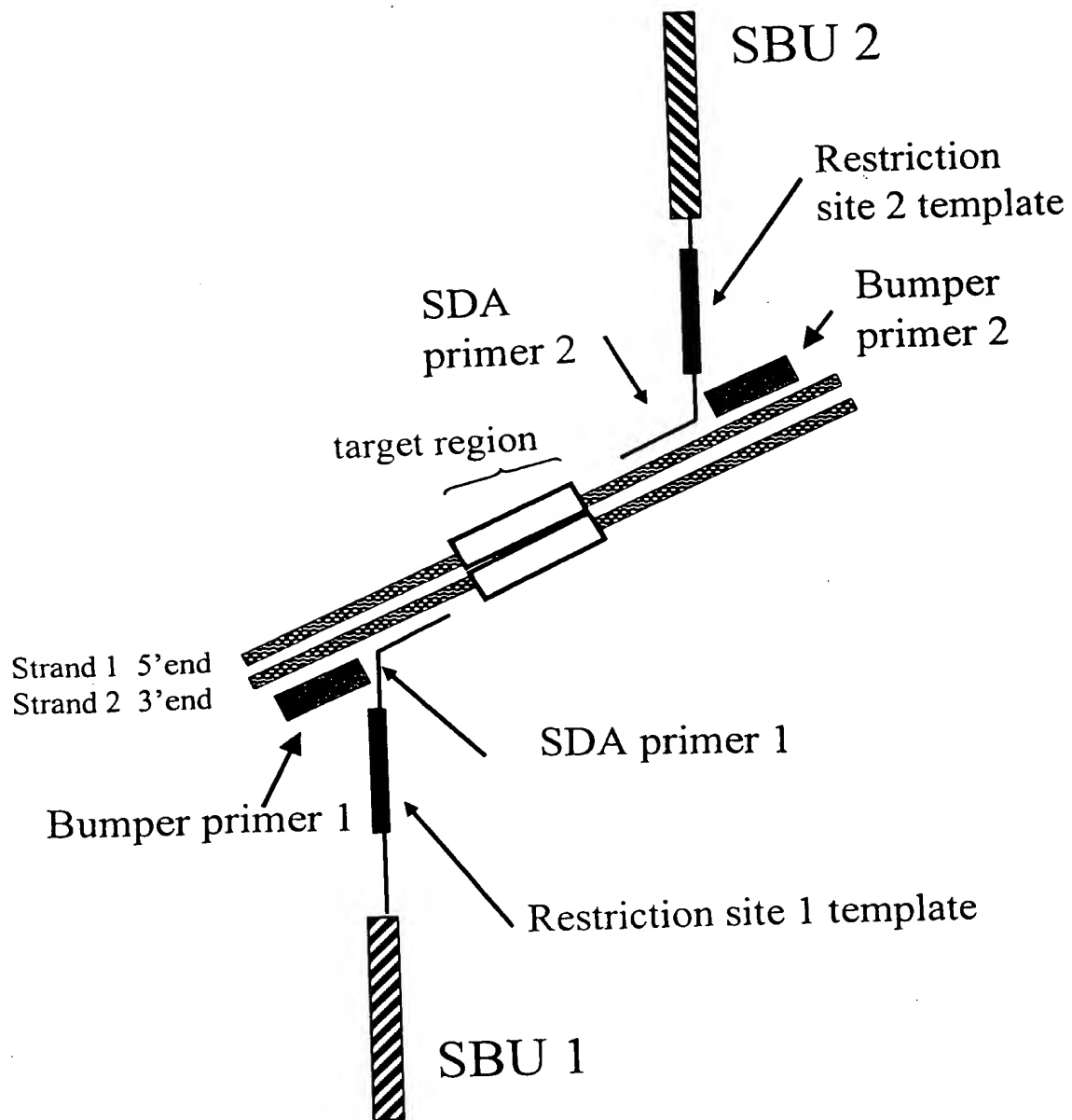
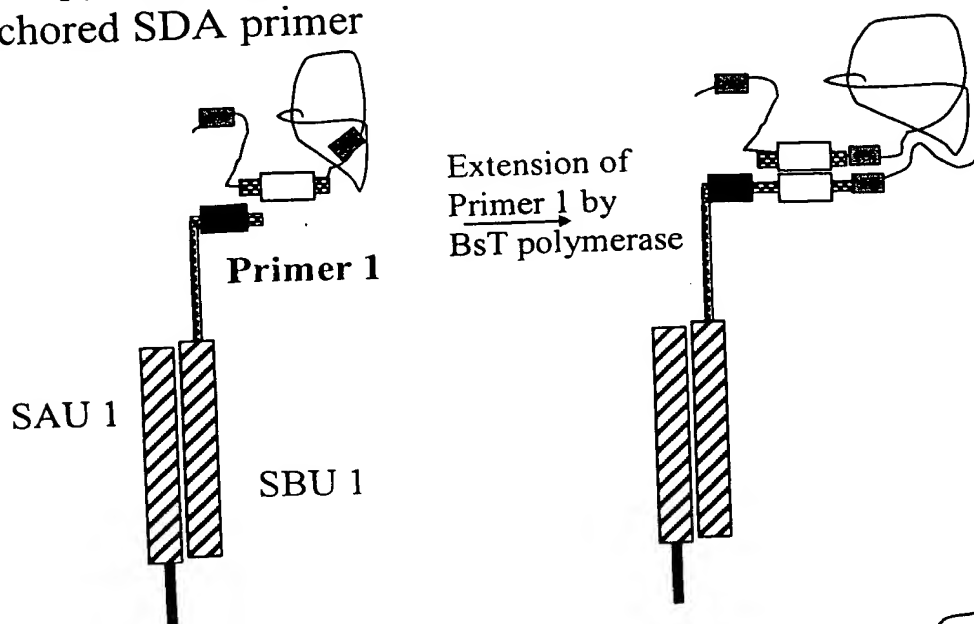


Fig. 27a

Phase 1: Initiation

A. Copying of target onto SBU
anchored SDA primer



B. Displacement of genomic DNA by
extension from bumper primer 1.

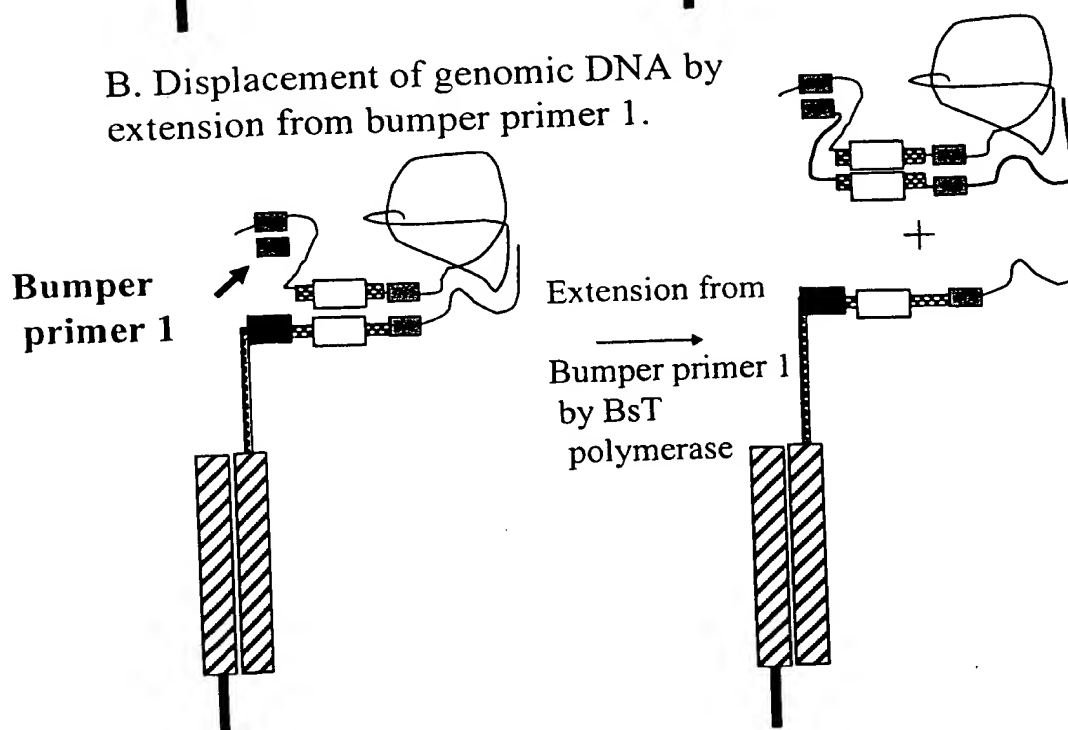
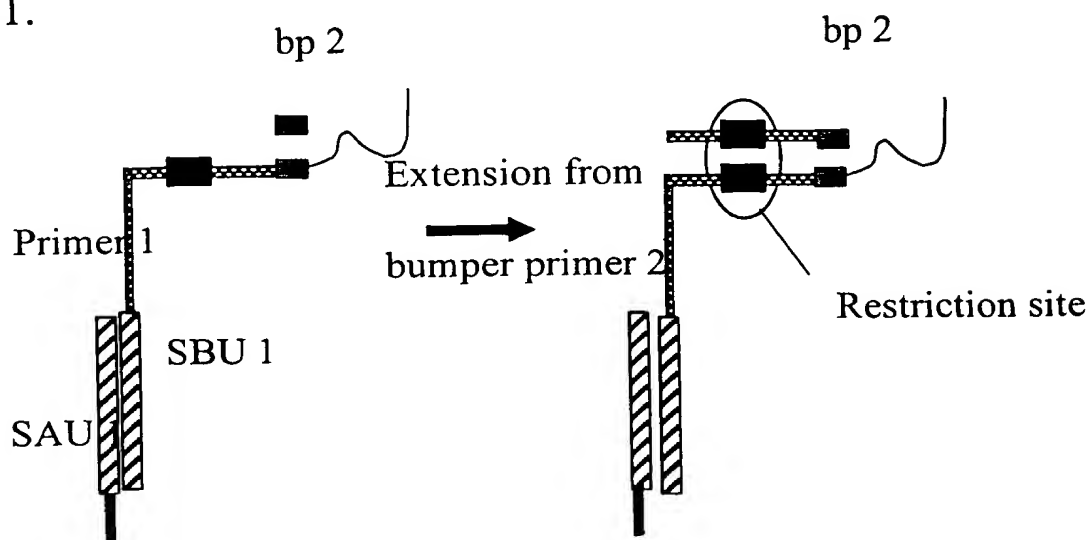


Fig. 27b

Phase 1: Initiation (continued)

C. Restriction site is activated in Primer 1.



D. Generate displaced S1 strands with target sequence

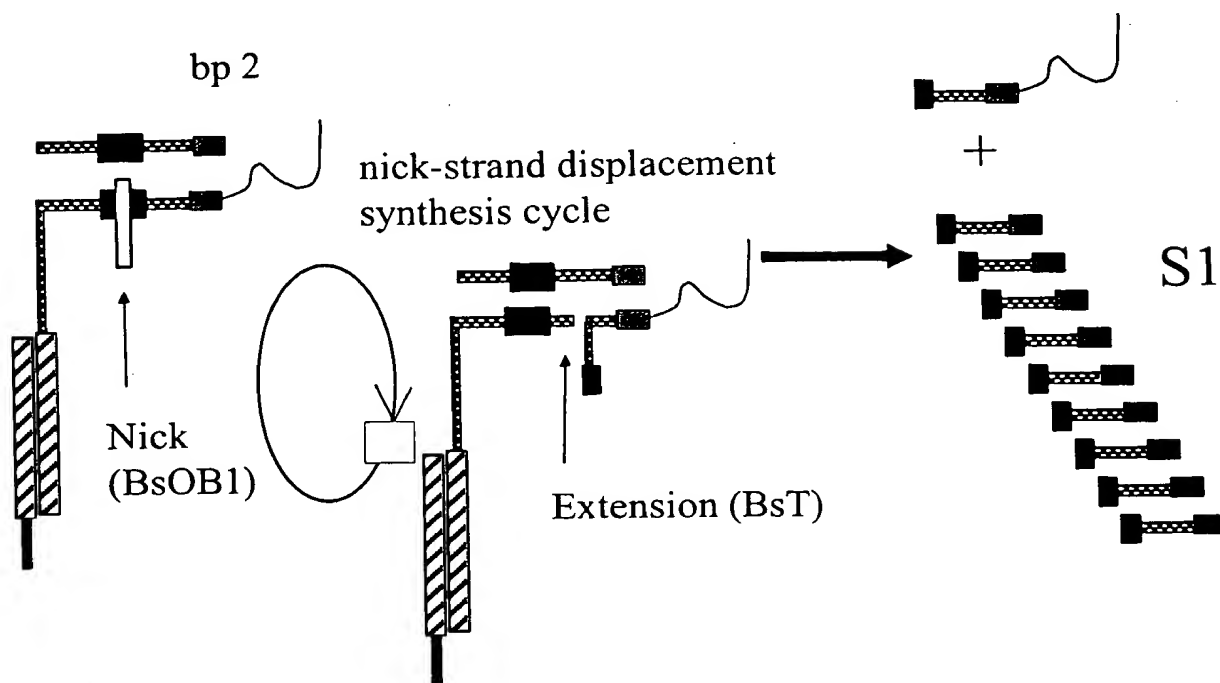
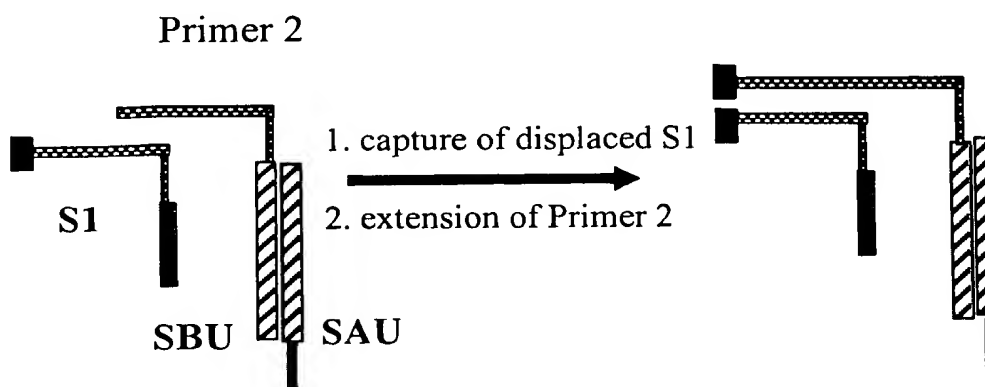


Fig. 27c

Phase 2: Linear Amplification via capture

A. One-for-one increase in anchored amplicon for every Phase 1 displaced strand captured



B. Generation of single stranded anchored amplicons

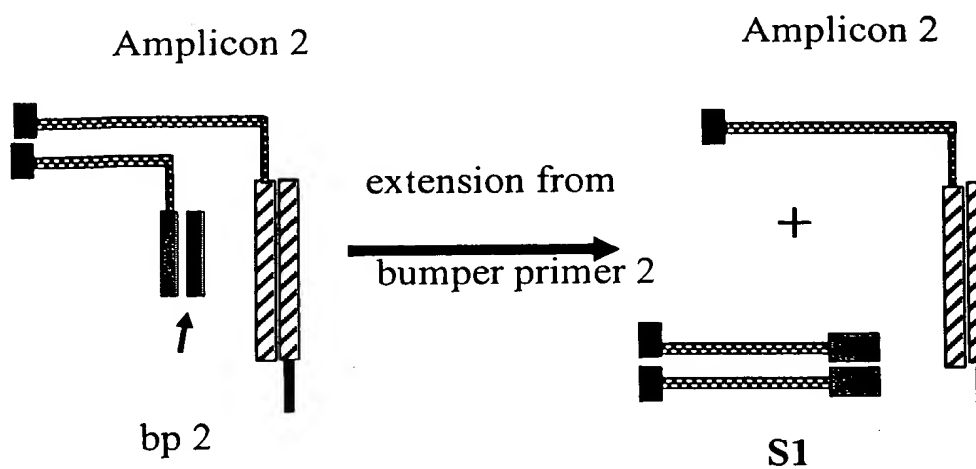
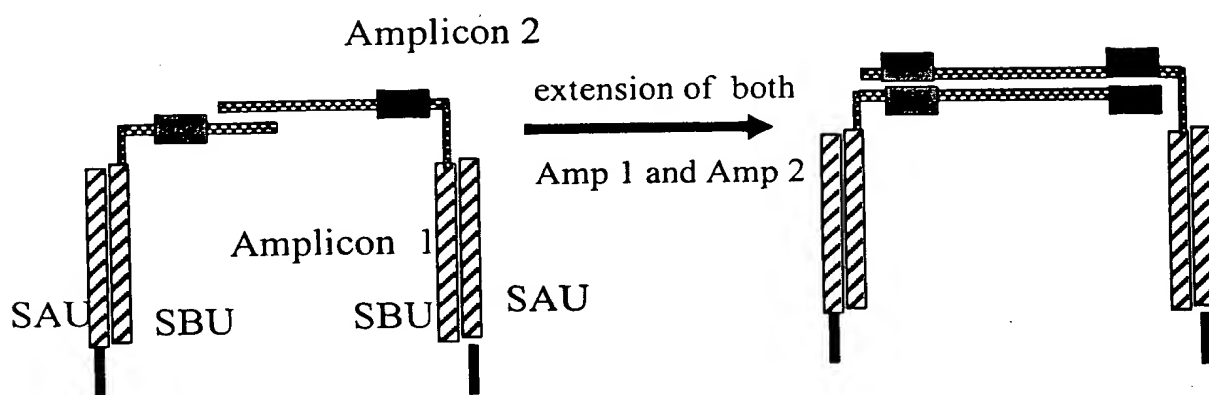


Fig. 27d

**Phase 3: Exponential Amplification via
bridging and capture**

A. Activate restriction site in both anchored Amplicon 1 and
anchored Amplicon 2



B. Generate S1 and S2 displaced strands with
restriction site on both ends

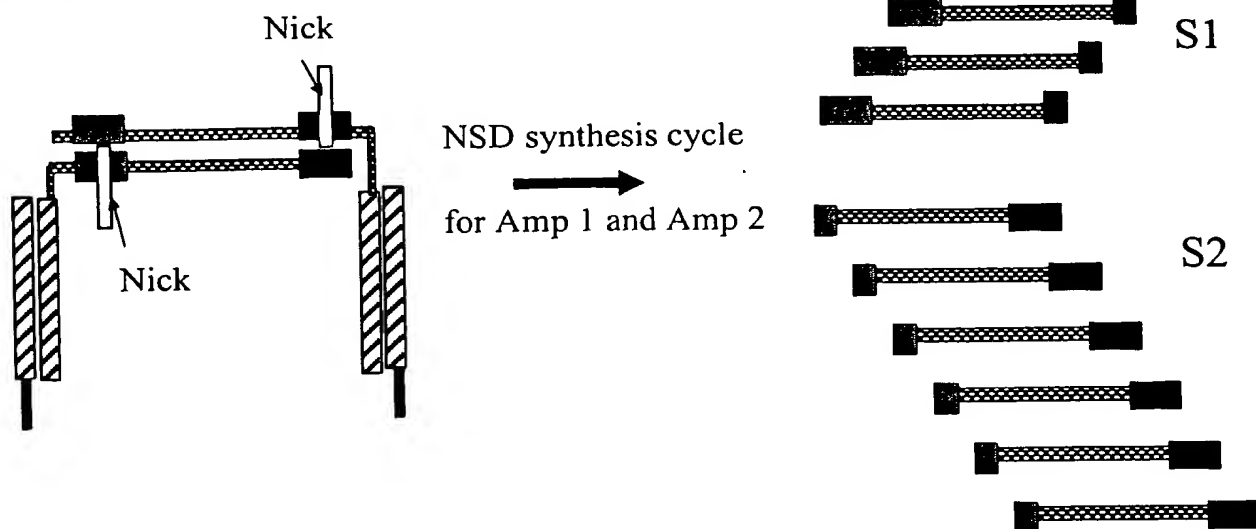


Fig. 27e

**Phase 3: Exponential Amplification
via bridging and capture (cont'd)**

C. Establishes a link between displaced strand capture and activation of restriction site for nicking and strand displacement synthesis cycle

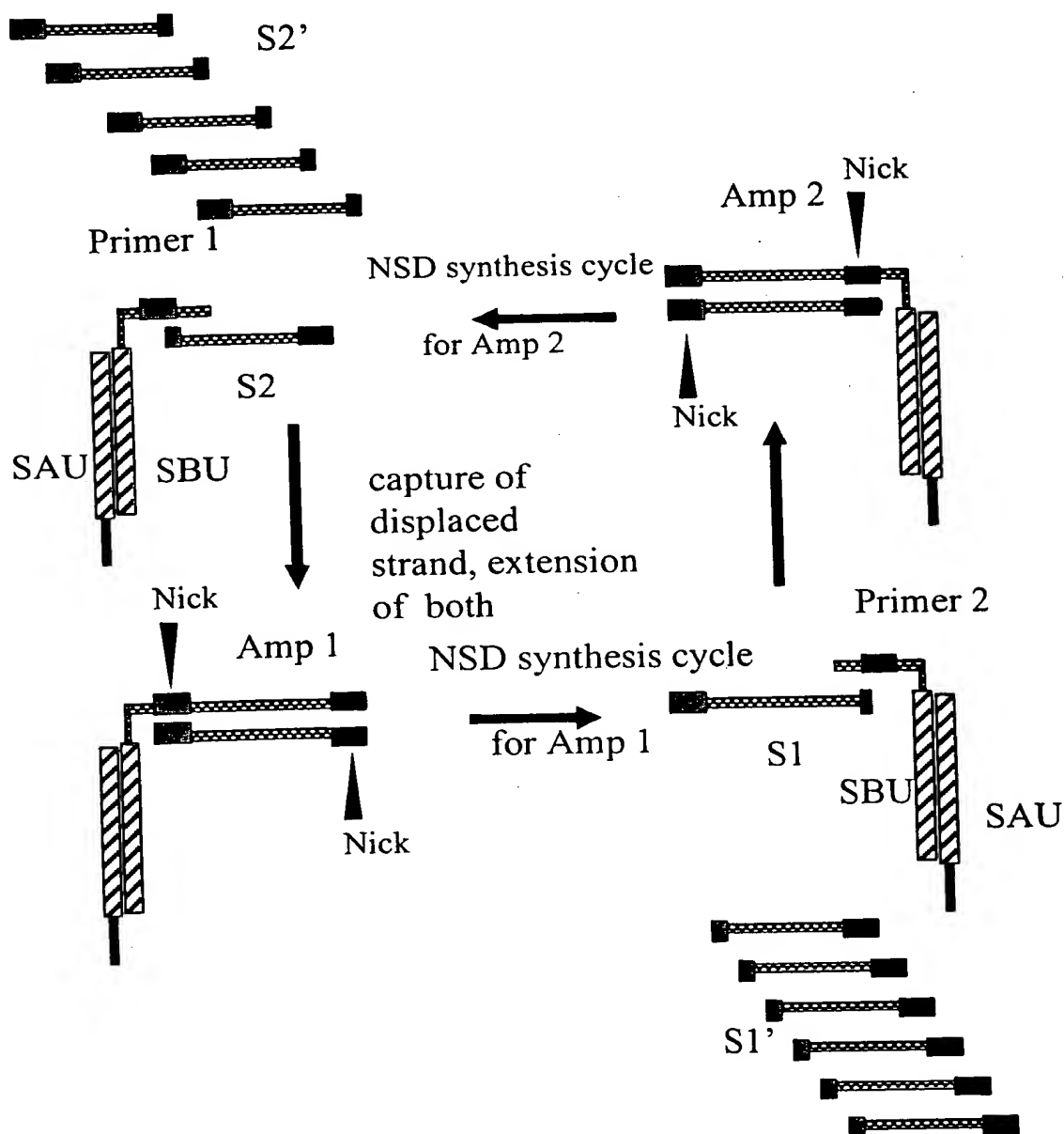


Fig. 28

